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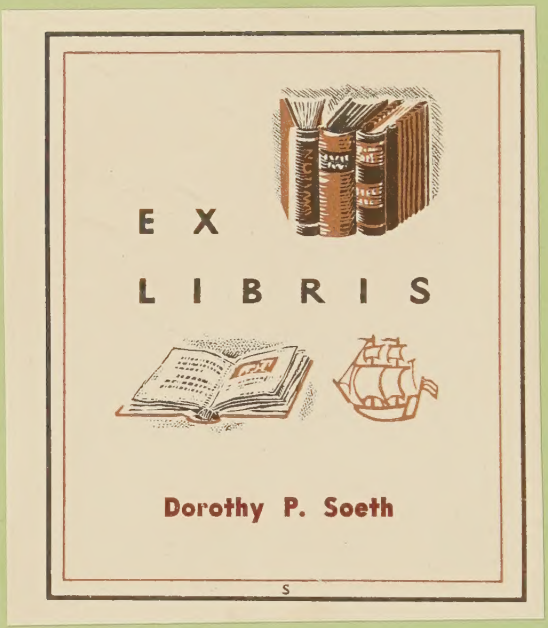
E X
L I B R I S
Dorothy P. Soeth
S

The Stream of History

THE SEA FIGHT BETWEEN THE ENGLISH SHIP *REVENGE* AND THE SPANISH FLEET.

The *Revenge* attacked single-handed a fleet of fifty-three Spanish galleons, and put a number of them out of commission before she herself was sunk.

From a painting by Frank Brangwyn.

The Stream of History

By

Geoffrey Parsons

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The Stream of History

CHAPTER XIX

THE RENAISSANCE

The Middle Ages have been misunderstood and gravely underestimated in modern times—save for the vague and inaccurate eulogies of the nineteenth-century romanticists from Sir Walter Scott to Victor Hugo. The Renaissance has been correspondingly overpraised or, rather, mispraised. Its name is doubly misleading. It implies that an older civilization was reborn into the world, a miracle that could not and did not happen. That there was a birth, at all, in the sense of a sudden beginning, is an equal misdescription. It was preceded by the great and pulsing era that built the Gothic cathedrals, an age of youth and swift growth, clearly the product of the times. The Renaissance was equally an evolution from the centuries that immediately preceded it, save that it drew one additional source of inspiration across 2,000 years of time.

The Middle Ages had passed their peak and were declining by 1300. The fourteenth century and the first half of the fifteenth century are a clear example of a transition period; these years can be classed either with what had gone before or with what followed, containing elements of both. What produces such a rise and fall of an era of civilization and how seed germinate in the fallow ground of a century like the fourteenth belong with the other many unsolved problems of history. Seed-time, plant, flower, and decay furnish

a rough and suggestive simile for the cycle, but no analysis or explanation. What is clear is that even in this transition period, blasted and handicapped in France and England by

PETRARCH.
From a fifteenth-century miniature.

the Hundred Years' War, there were great forces stirring. To mention a few names in literature is to show what vigorous life breathed the waiting air. Petrarch and Boccaccio in Italy, Villon in France, Chaucer in England, belong in this period; all of the fourteenth century save Villon, who died

about 1463. For the arts, in which the Renaissance was to be peculiarly triumphant, there were the Italian Giotto, at the beginning of the period, and the Flemish Van Eycks at the

BOCCACCIO.
From a fresco painting by Andrea del Castagne

end. It is difficult to escape the belief that here were the beginnings of another great upthrust of Nature that must have come to flower even though the particular movement that gave the Renaissance some of its peculiar characteristics had never happened.

That movement was the rediscovery of the ancient world, usually called the Revival of Learning.

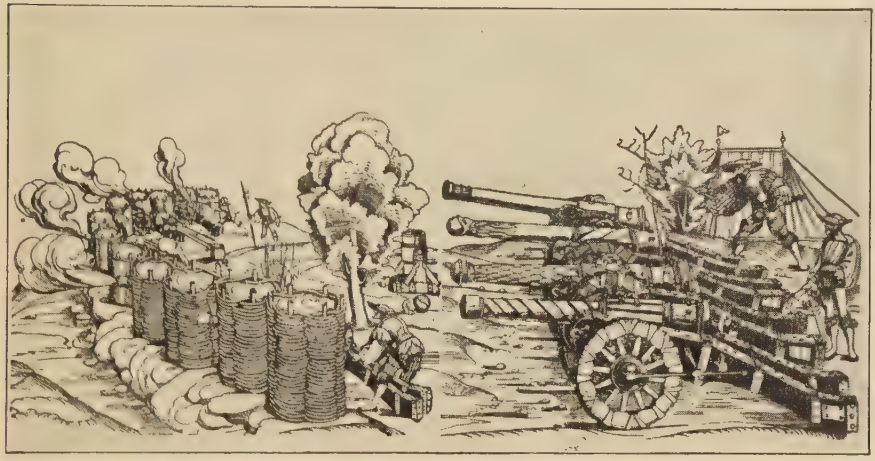
Other events quickened the stream or altered its course. Among them were:

The Reformation, or Protestant Revolt, and the Counter-Reformation.
The discovery of the new world—the Americas.
The triumph of nationalism under absolute monarchy.
The slow beginnings of modern science.
Three great inventions:
The mariner's compass.
Gunpowder.
Paper and printing from movable type.

The origin of the compass is obscure. The belief that the Chinese knew of its properties centuries B. C. is now doubted. Certainly they never used it to become offshore mariners. The Arabs may have known of it. But its development into a useful and reliable instrument of navigation was the work of Western peoples, probably Italians or Scandinavians, from the thirteenth to the fifteenth centuries. It is difficult to see how the great voyages of discovery could have been sailed without it. Here is a clear case of great human events waiting upon the invention of a tiny piece of apparatus, a bobbing needle in a box. But for it the whole development of America might have been long delayed and wholly different.

Gunpowder was an old story as an explosive in fireworks.

The Chinese used it thus in the sixth century. Roger Bacon studied it in the thirteenth. Who first thought of using it to propel a missile from a gun-barrel is not known. The invention dates from the fourteenth century, and by 1500 cannon



EARLY SIXTEENTH-CENTURY CANNON.
From a contemporary wood-cut.

were so far developed that all the old machinery of warfare was passing, bows and arrows, lances, armor, most important of all, walled castles. Here the new invention influenced history. The mediæval system centred around the feudal castle and the walled town. The protection that their stones afforded was an essential item in the feudal organization. When walls became useless to withstand armies, the downfall of feudalism, already approaching, was hastened and assured. Gunpowder also aided the rise of the national rulers into full sway. As an even farther-reaching effect, gunpow-

der, by industrializing war and giving the advantage to the settled peoples, with towns and factories, ended the chances of the nomads for all time. No Genghis Khan could sweep over Europe after 1500. The American Indian stood no chance against the colonists. The Eastern nations could meet the West in equal battle only by copying the industrialization of the West, as did Japan.

The invention of paper and printing from movable types probably deserves to be ranked as the most important since the invention of the alphabet by the Egyptians. For good or ill our whole modern civilization is built upon printed books. Yet it is necessary to distinguish between what printing did and did not do. The Greeks knew nothing of printing. They had only manuscripts, copied painfully by hand upon papyrus. Yet they wrote some of the greatest pieces of literature, they created a great architecture and sculpture, and they developed an extraordinary number of fine minds, some of them probably as great as any that the world has ever seen. Plainly, printing was not essential to genius or an intellectual aristocracy. The high achievements of the Middle Ages were equally without benefit of printing. The flowering of religious faith and the great cathedrals that it produced were not aided by printed books. Neither were the legal system and the empire of Rome. Literature, art, intellectual power, religious faith, organization—what was left for printing to foster? Democracy, in respect to government and to the mind, and science are two clear answers. The former would

have been impossible, the latter long delayed without the vastly improved means of communication which printing affords. Neither was the product of the Renaissance, however; the world waited till the eighteenth century for their rise. It is accurate to think of printing as the basic step in that speeding up of human intercourse, with respect to ideas as well as to transport of cargoes, which has been so enormously accelerated in recent years with the arrival of steamships, railroads, telegraph, telephone, flying, and radio. The effects of this bettered communication upon the mind of the world will be discussed in connection with the last two centuries. Since modern invention rests upon modern science, and modern science would have been postponed without the swift interchange of ideas by means of print, it can be seen how fundamental the use of movable type was to the cause of civilization. The immediate effects upon the Renaissance were general rather than specific—to spread civilization more rapidly and stimulate a larger number of minds than had perhaps ever been intellectually excited before.

It is sometimes asserted that printing freed the human spirit by making it possible for every man to do his own thinking. The individualism of belief which followed tardily in the wake of the Protestant Revolt has been cited in support of this opinion. It seems a highly optimistic view of the actual results. Faith in the printed word has in many minds succeeded faith in individual authority. Free minds are still rare, as the story of modern times will make clear. The point

is relevant here because, after the great and original outburst of genius that marked the literary Renaissance, the movement relapsed into a frigid classicism that leaned too heavily on Greek and Roman leadership. Faith in the letter of the classics succeeded fresh and original thought. Printing that helped spread the movement helped set up this faith in the printed word.

Freedom of thought burned brightly in Greece without printing to aid. It was extinguished in the Dark Ages, relit during the Renaissance, and again in the last two centuries. It is to be thought of as a condition rarely achieved by many in any period, and maintained in modern times by courage and imagination rather than by any machine.

Whether a great invention is summoned by necessity or creates the era that it serves has been often debated. Like most of the broad questions that history raises, no answer is possible. Yet it can fairly be argued of the invention of printing that the need preceded the event. Europe was eager for texts of the new learning when Gutenberg printed his first page from movable types at Mayence, in Germany, about 1450. William Caxton followed in London in 1474, the famous Aldine Press in Venice dates from 1494 and the Plantin house in Antwerp from 1549. By 1500 thousands of books had been printed.

Paper was as essential to the making of many books as movable types. The ancient world—Egyptians, Greeks, and Romans—used papyrus. The Middle Ages used parchment

made from the skins of goats and lambs. Paper was another contribution of the Arabs to Europe. The Chinese had made paper several centuries B. C. In the eighth century A. D., at the height of Arabian power, several Chinese paper-makers

EARLY PRINTERS' DEVICES.

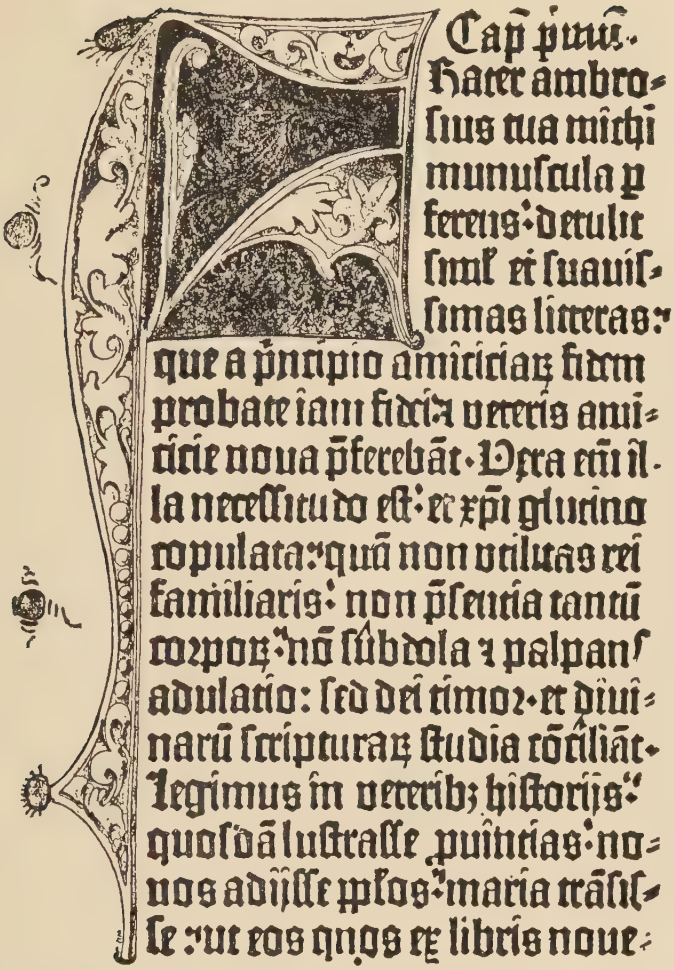
Left. A device used by Christopher Plantin, possibly designed by Peter Paul Rubens. *Right.* The device of William Caxton.

were captured in Samarkand. The Arabs put the invention to work, and the Moors introduced it into Spain in the twelfth century. Paper was common in Europe by the fourteenth century, thus antedating printing.

Amid all these rich and stirring events, it was the fresh contact with ancient Rome and Greece that gave the period much of its distinctive character; that, in varying degree, and least of all in Germany, determined within what banks the stream would run. As with all human development, no precise limits of time can be assigned. The years from 1400

to 1650 roughly include the northward course of its wave, from Italy to England. The classic revival naturally enough began in Italy, which received the least Teutonic blood and possessed the most direct inheritance of Greco-Roman tradition. Gothic architecture, for one symptom, never found a secure foothold in Italy. The Renaissance ran its course in Italy from 1400 to 1600. It reached France around 1450 and was declining there by 1650. The dates of the English Renaissance run yet later. The case of Germany was peculiar. The influence of Greece and Rome was least felt in those northern countries that, unlike England, had little admixture of Mediterranean peoples or civilization. The Renaissance, in the broad sense of the term, deeply stirred Germany; the Revival of Learning with its classic influences was of limited effect.

The coming of the Barbarians interrupted the progress of European civilization for 700 years. The Middle Ages marked the resumption of progress and the appearance of a fresh civilization, neither Roman nor Teutonic but European, a fusion of the two plus Christianity. It involved a recapture of part of the Greek and Roman tradition; Aristotle, in the translations in which he was known, was the Bible of the schoolmen. The Renaissance went farther and recaptured the whole of the antique world, its philosophy, its poetry, its art. The result naturally was to increase the classic element in European civilization. Yet in the great years of the Renaissance there was more than slavish imitation of antique


Cap̄ p̄mū.
Hater ambro-
sius tua michi
munuscula p
ferens: detulit
simul et suauis-
simas litteras:
que a p̄ncipio amiciciaꝝ fidem
probate iam fidei: et veteris ami-
ticie noua p̄ferebāt. Vera etiā il-
la necessitudo est: et xp̄i glutino
copulata: quā non vtilitas rei
familiaris: non p̄sentia tantū
corporꝝ: nō subdola et palpans
adulatio: sed dei timor. et diui-
narū scripturaꝝ studia cōciliāt.
Legimus in veteribꝫ historijs:
quosdā lustrasse p̄uincias: no-
uos adijsse p̄plos: maria trāsis-
se: ut eos qnos ex libris noue-

A FACSIMILE OF THE FIRST PAGE OF GUTENBERG'S THIRTY-SIX-LINE BIBLE.

examples. There was a new flowering of European civilization, in art and thought, this time incorporating the whole mighty stream of Western tradition from Homer forward. With the Renaissance the unity of the Western story, broken by the Dark Ages, was completely restored. After the mighty

1st Chart

THE RENA

ITALIAN FRENCH ART DUTCH. SPAN. GERMAN

FRENCH ITALIAN LITERATURE ENGLISH

60
40
20
1600
80
60
40
20
1500
80
60
40
20
1400

Rembrandt 1606-69

Velasquez

Van Dyck

Rubens

Racine

CLASSICISM

Corneille

La Fontaine

Pascal (Pensées)

Molière

Dryden 1631-70

Bunyan 1628-88

Milton (Paradise lost)

Castle building in France

Decline of renaissance art in Italy

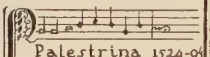
Cervantes

Shakespeare

Marlowe

Sidney 1554-86

Spenser 1552-99



Palestrina 1524-94

Montaigne (essays)

Goujon 1515-68

Tintoretto

Veronese 1528-88

Titian

Cellini

Michael Angelo

Holbein

Surrey 1517-47

Wyatt 1503-42

Rabelais

Marguerite de Angoulème

Castiglione (Courtier)

Machiavelli (Il Principe)

Thomas More (Utopia)

Raphael

Leonardo da Vinci

Botticelli

Dürer

Aldine press in Venice

Isabella d'Este

The Caxton press 1474

Malory

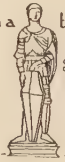
Morte d Arthur

Ballads

Villon

HUMANISM

Donatello



Hubert Van Eyck

Jan Van Eyck

Chaucer 1340-1400

Petrarch 1304-74

Boccaccio 1313-15

I S S A N C E *Cultural events*

PHILOSOPHY **SCIENCE** NATURAL SC.

CATH. **RELIGION** PROT.

Newton (*Principia—Gravitation*)

$F = G\frac{m_1 m_2}{d^2}$

Locke 1632–1704

Peace of Westphalia

Jansenism in France

Thirty Years War

Harvey *Circulation of blood.*

French Academy

Descartes *Reasoning free from authorities*

Galileo *telescope*

Kepler *(Law of planetary motion)*

SECTARIANISM in ENGLAND

Quakers

Baptists

Congreg.

Presbyter. Separatists

Puritans

COUNTER-REFORMATION

High church Low church

ENGLISH CHURCH

Jesuits at the height of power

JHS

Francis Bacon *(New Atlantis)*

Giordano Bruno

Tycho Brahe. *Astronomical observation.*

Massacre of Huguenots St Bartholomew's Eve 1572

Iconoclasts in Holland

John Knox in Scotland

Mercator 1512–14 *Cartography*

Council of Trent 1545–53

Peace of Augsburg 1555

Jesuits 1539

Calvin

English church 1534

Loyola 1491–1556

Augsburg Confession Melanchton 1530

Diet of Worms 1520

Luther

Leo X.

Theses of Wittenberg 1517

Julius II

Zwingli

Patron of arts

Cosmographien writers Apianus, Gemma Frisius Munster, etc.

Copernicus *Structure of Solar System*

Erasmus

Leonardo da Vinci

Alexander VI (Borgia)

Savonarola executed 1498

Rediscovery of Ptolemies map

First printed book 1456

Thomas a Kempis *Imitation of Christ*

Hussite wars

Council of Constance

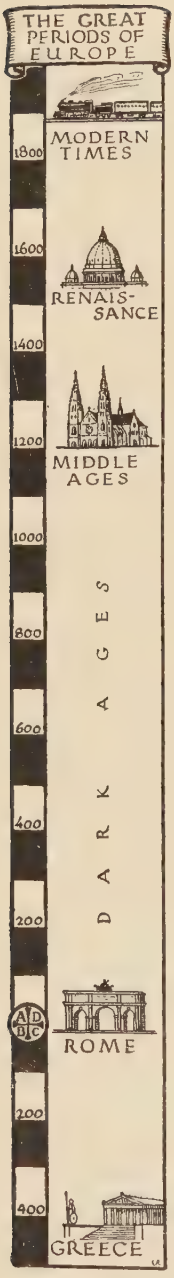
Huss burned 1415

Great schism

Lollards in England

60 40 20 1600 80 60 40 20 1500 80 60 40 20 1400

Rajz



forces of the period were spent, lesser men did devote themselves to copying Greece and Rome, with frigidly classical results. The great years were as utterly fresh and original as any thirteenth-century Gothic cathedral.

We are approaching one of the greatly disputed battle-grounds of history. The quarrel reaches its height with the Reformation; it begins with the Renaissance, which reintroduced paganism to Europe, and thereby placed Christianity in issue. It is exceedingly difficult to maintain an impartial calm amid such heavy cannonading. Therefore it will perhaps be useful to set down one agreed fact at the outset; that is, the extraordinary richness of the period in great deeds and great men. Almost was there an explosion of human achievement in the high years of the Renaissance. In the following sketch of the movement by nations, the difficulty will be to limit the individuals to be mentioned. Whether the lasting effects of the Renaissance were predominantly good or evil, it ranks in richness of genius with the greatest periods of western Europe—with Greece in the fifth and fourth centuries B. C., with Rome from 100 B. C. to 100 A. D., with the twelfth and thirteenth

centuries of the Middle Ages, and with the eighteenth and nineteenth centuries of modern times.

These achievements were far from uniform across Europe. The diversity already distinguishing the newly formed nations of Europe was well illustrated in the various intellectual courses of the Renaissance in the several nations.

Italy, after leading in the study of the classics, contributed less to literature or philosophy. Her mastery came in the arts of the eye—in painting, sculpture, architecture, and craftsmanship in smaller objects, silverware, jewelry, etc. Politically, the Renaissance brought Italy tyranny, disaster, and foreign captivity. Morally, Italy touched the poles of nobility and vice.

Germany contributed the invention of printing, a few great artists, and the leadership in the Protestant Revolt.

Spain excelled in painting, in prose satire, in drama. Her discoverers and those of Portugal led the world westward. For a whole century Spain was the most powerful nation of Europe.

The Low Countries (now Belgium and Holland) produced some of the greatest art of the Renaissance, and in the birth of Protestant Holland the pioneer of free nations.

France wrote the greatest prose of the Renaissance, expressing the sanest philosophy of life, built the most beautiful castles, and furnished an adventurous breed of explorers in the New World.

England was weak in the visual arts, rich in philosophy

and the forerunners of science, and supreme in poetry and the drama. Her great captains won the seas from Spain.

All the nations contributed to create the new art of music. Rhythm and melody had been among the oldest arts of primitive man. The Greeks sang in octaves. Beginning slowly in the Middle Ages, now developing rapidly in the Renaissance, music achieved the harmony of many intervals and gave man a new speech. Religion, the dance, and folk-song were, as of old, its chief sources of inspiration. The Italian Palestrina (1526–1594) and the German Bach (J. S.) (1685–1750) stand as its supreme masters in this formative period, the years of the latter bridging the transition from Renaissance to the present era.

The Renaissance saw the breakdown of feudalism. Local rights surrendered to the absolutism of an autocratic ruler. Save in Germany and Italy, the decentralized confusion of feudalism was succeeded by a highly centralized monarchy.

I. ITALY AND THE REVIVAL OF LEARNING

The story of the Renaissance in Italy is not single. It is as varied as the many rich and independent cities into which her territory was split. If the outstanding characteristic of Europe was to be its division into independent nations, that tendency was already carried to an extreme of local loyalty within the borders of Italy. This particularism caused the political downfall of Italy as a nation; it gave richness and a stimulating variety to the colors of its mind and art. It was

in small, independent cities, little larger than ancient Athens, that the Renaissance first and most richly bloomed.

Of the forerunners, Petrarch (1304–1374) stands out by reason of his pioneer interest in the classics that anticipated the Revival of Learning. He was a collector of Latin manuscripts, a passionate admirer of Cicero and Vergil. He is one of many that have been called "the first modern man," and to none has the term been applied more justly. Only a portion of Cicero was before him; the "Iliad" he knew only in a Latin translation that his dearest friend, Boccaccio (1313–1375), the enchanting tale-teller, author of the "Decameron," made for him. He worshipped these pagan writers and, like many others in the early Renaissance, was not the less loyal to Christianity. He stood between Saint Augustine and Vergil, he once remarked. His odes and sonnets to his beloved Laura are his most famous work, chivalrous love poetry written in the maturing Italian tongue and never surpassed for sheer perfection of form.

Zest for the classics grew apace. By 1400 Greek scholars were entering Italy from Constantinople. The search for manuscripts became the chief concern of learned men. When Constantinople fell to the Turks in 1453, a small army of scholars with their texts fled westward. It is hard to suggest a modern parallel to the excitement, the passionate interest, which the discovery of these old authors brought to Italy. Modern unearthing of mummies and inscriptions offers a pale comparison. For here were not mere historical data but the

greatest works of the human mind. It was very much as if Homer, Euripides, Plato, Lucretius, and Cicero were alive to-day and contributing to the press the classics that bear their names.

Florence

For a parallel to Florence in the Renaissance one must turn back to Athens in its great years. Here was another small city pulsing with every artistic energy, gay with color and song, thinking greatly, deeply moved by religion. As with Athens, warfare was frequent, against rival Italian cities, against foreign invaders. As with Athens, too, there has rarely been a worse-governed spot, despot succeeding republic and siege following plague. Through all this turmoil this small city on the banks of the Arno in a century and a half raised buildings and carved statues and painted pictures that make it still, after three centuries, one of the great art centres of the world.

The Medici were the rulers of Florence in its greatest years, including the tall figures of Cosimo (1389–1464) and his grandson, Lorenzo the Magnificent (1449–1492). The former marked the peak of the Italian Renaissance, when for a moment it seemed as though Christianity and paganism could strike hands in a new civilization of greater glory than any that had gone before. The latter witnessed the decline toward license and a corrupt materialism. Lorenzo died in 1492, the year that Columbus discovered America. It is hard

to find a parallel to these princely democrats of Florence, learned and splendid, generous and cruel, sensuous and pious. One feels in their contradictory traits the forces of two great movements at war and knows that their type could not endure. "Thou hast conquered, O pale Galilean," wrote Lorenzo in a play about Julian the Apostate. Tradition placed the words in the Roman emperor's mouth, but they might well have expressed a Medici's realization of the doom of paganism.

From a photograph by Alinari.

LORENZO DE MEDICI.
From the statue by Michael Angelo in the Medici Chapel, Florence.

At the other pole of life stood Macchiavelli (1469–1527), pagan and cynic, who built a philosophy around the ideal of absolute rule by a strong state. Accepting this goal as the best system of government, he defended every means to achieve it, whether vice, crime, or cruelty. He devised a system of law-

lessness, of falsehood, of ruthlessness. His famous book, "The Prince," was the Bible of the absolutism that followed the Renaissance down through the eighteenth cen-

Courtesy of the Metropolitan Museum of Art.

SAVONAROLA IN THE PULPIT.

From a contemporary picture in Savonarola's book, the "Compendio di Revelatione," published in 1496.

tury. Catherine de Medici was the perfect flower. Its principles lived on in the aims and methods of Napoleon and Bismarck.

It was amid the growing vice and cruelty of Florence in Lorenzo's later years that the gaunt priest Savonarola (1452–1498) began his career as a preacher. He succeeded in sweeping all before him with his eloquence, and became a benevo-

THE VIRGIN, THE INFANT JESUS, AND SAINT JOHN.

From the painting by Botticelli, in the Louvre, Paris.

lent despot. He imposed a rigid Puritanism on the city, and denounced Pope Alexander VI for his evil life that brought the papacy to its darkest hours. After a few years his people, weary of restraint, turned on him and, backed by the Pope, seized and put him to death.

Of the artists who ennobled Florence, Donatello, the sculptor of youth, and Botticelli, the painter of pure beauty, are the best-known of a line that culminated in Leonardo da Vinci (1452–1519), one of the greatest of men. The art works of this stupendous genius that have survived are few —"The Last Supper" at Milan and the "Mona Lisa" of the Louvre are familiar to every one. His drawings rank with the greatest work of pen and pencil. He was not less a student of nature, a true scientist, in the modern sense. A century before Bacon he used the experimental method which has made modern science possible. To mathematics, astronomy, physics, geology, and anatomy he gave devoted study. His name enters into the history of countless scientific topics from capillary attraction to flying-machines. He is to be ranked as a great pioneer of modern science. He travelled much, passing many years of his life at Milan and dying in France, whither he went under the patronage of Francis I. Artist and scientist, he was as well an engineer of ability, musician, poet, and philosopher. Strong, handsome, and kind—he could break a horseshoe with his hands and would buy caged birds to set them free—he stands as perhaps the most complete man of all time.

Rome

As the seat of the papacy, Rome was a world-city, seething and corruptive. The Renaissance flowered swiftly and decay arrived apace. The decline of the papacy in spiritual leadership kept step with the general vice. Alexander VI was the worst of a number of Renaissance popes. The temporary failure of Christianity before paganism was nowhere so clear as at Rome.

This strange city could be the home of two such opposite creatures as Benvenuto Cellini and Michael Angelo. Both belong to the latter half of the Renaissance, after 1500. Cellini lives in his memoirs, the candid confessions of a great rascal. He was a fine craftsman in small works of beauty, a typical product of an artistic movement passed beyond its peak, elegant and ingenious. But it is for his book, with its naïve bragging and swift sword-thrust, that he lives immortal, for all its lies the best contemporary picture of the Renaissance.

If Michael Angelo (1475–1564) was not the equal of da Vinci in sheer intellect, he was his equal in nobility of character, and far surpassed him in vigor of artistic output. No time has produced a purer soul, and the fact cannot be brushed aside. There were plainly great and noble forces in an age that could count two such characters. Michael Angelo was first of all a sculptor, but his decorations of the Sistine Chapel, the ceiling in particular, rank with his greatest work.

MONA LISA.

From the painting by Leonardo da Vinci, in the Louvre, Paris.

In the originality and wild grandeur of his conceptions, and especially in their expression of the soul's tragic conflict, he had passed beyond classical influence, and one feels him unmistakably the first of the moderns.

The list of great names seems endless. Each of the cities had its peculiar quality, its great family with its own virtues and vices, its great artists, unique in character. Milan was the home of the Sforza family, perhaps the most cruel rulers in Italy. Venice, a great sea-power, pleasure-loving and pagan, gave birth to a glorious group of painters, supreme in color, including Titian, Tintoretto, Giorgione, Veronese, all of the first rank. Much could be written of the women of the Italian Renaissance—educated with their brothers, beautiful and, like their brothers, often unmoral. Beatrice d'Este and Isabella d'Este, sisters of the house of Ferrara, were types of the fine and high-minded; Lucrezia Borgia, daughter of Pope Alexander VI, of the more corrupt. Courts were never so intellectual and graceful as in these small Italian cities of the Renaissance. Castiglione's "Courtier" gives a memorable picture of them: of the gentleman, cultured but natural in manner and in speech, and the lady, trained to be his companion. It is, perhaps, the first book since antiquity to uphold the rights of women to development, and the fact accurately records the conspicuous position of the aristocratic women of Italy.

By 1550 the Renaissance had ceased to advance in Italy. It had brought disunion and demoralization in its wake, and

the price to be paid was three centuries of invasion and subjection. Intellectually the pioneers of Europe, the Italians fell, politically, to the rear. Charles VIII and Louis XII of France were the first invaders; Charles V of Spain followed and placed the whole peninsula in servitude; and until Napoleon arrived in 1796, Italy was for the most part partitioned between Spain, Austria, and the papacy.

2. GERMANY AND THE REFORMATION

The great contribution of Germany to this period was in the Reformation, more accurately termed the Protestant Revolt, and though other nations aided, it is convenient to trace the rise of the movement in relation to the story of Germany which gave it birth. It is simple to relate the superficial events of the Reformation. Some of its causes are obvious, too. Yet it is extremely difficult to assign due weight to these causes, and even harder to agree on the gains and losses to Western civilization that resulted. The fanaticism of the period still colors, though in subdued tones, the minds of historians and readers alike. Some progress has been made toward an impartial revaluation. Much remains to be done. All history is to be read with a realization that its generalizations are expert guesses rather than scientific facts. This particular section covers a battle-ground in a war that is still being waged, and the smoke of partisanship still prevents either accurate observation or impartial judgments upon which guesses may be based.

From a photograph by Alinari.

THE CREATION OF MAN.

From the ceiling painting by Michael Angelo in the Sistine Chapel, Rome.

One obvious cause of the Reformation, much stressed in earlier histories, was the corruption of the Church and the weakened prestige of the papacy owing to the "Babylonish captivity" of the popes in France at Avignon and the consequent "Great Schism" lasting forty years (1378–1417), during which there were first two, then three rival popes—one a Frenchman at Avignon, the others Italians in Italy. Protestant writers long regarded this corruption as the main source of the Reformation. Current research tends to minimize this cause and to stress other elements as more important.

Similarly with Humanism and the Revival of Learning. Their relation to the Protestant Revolt has also been exaggerated, and as will be seen in the case of the greatest of Humanists, Erasmus, the "new learning" did little to fire men to religious schism. The rediscovery of the classics and the diffusion of books through the printing-press fostered the Reformation chiefly by ending the monopoly of learning which the clergy had theretofore possessed and placing the Bible and other books in a wider circle of readers. Humanism contributed nothing of Greek rationalism to the course of the Reformation, and one must guard against transporting later ideas into this early Protestantism. The extreme conservatism of Protestant fundamentalists of to-day is the true child of Luther and Calvin.

Of the underlying causes of the Reformation, the greatest stress is now laid by most historians upon political forces. In some cases these were personal and dynastic. More funda-

mental, and the central fact of the Reformation in this view, was the inevitable and general clash between the emerging nations of Europe and the secular powers of the Church. It is to be remembered that the Church was an international state, of which every one was a member. It laid and collected taxes, it enacted laws and enforced them with its own courts. Its secular powers necessarily collided with the growing independence of the nations, and created an irritation and restlessness that made revolt against Rome on any ground welcome. It needs to be continually recalled that the whole course of the Reformation, its success in some countries, its failure in others, was inextricably involved in these political considerations. Broadly speaking, the rulers of the northern countries—Germany (including the Netherlands), England, and, to a considerable extent, France—had long shown an impatience toward papal officials, papal taxation, and papal independence of secular authority. The quarrel between the emperor of the Holy Roman Empire and the Pope was perennial. In England various laws were passed curbing the powers of the Church, notably the statutes of Mortmain, designed to limit the holding of landed estates in perpetuity by the "dead hand" of the Church.

There were also spiritual and intellectual issues of great importance. Especially in these same northern countries the fourteenth and fifteenth centuries showed religious tendencies at odds with papal authority. An Englishman, John Wycliffe (*c.* 1320–1384), was the pioneer of this move-

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THE ENGLISH PEOPLE, IN SPITE OF PROSECUTIONS FOR HERESY, PERSIST IN GATHERING SECRETLY TO READ ALOUD WYCLIFFE'S ENGLISH BIBLE.

From a painting by George Clausen, R. A., by courtesy of Thomas Nelson & Sons.

ment. He has been called the Morning Star of the Reformation, and his career accurately forecast the main features of that movement. A cleric and a lecturer at Oxford, his first writings were an ecclesiastical defense of the action of the British Parliament in refusing the tribute demanded by the Pope. Thereby he showed his sympathy with the rising tide of nationalism and its natural opposition to Roman interference. He soon broadened his attack so as to anticipate the essentials of Protestantism as it developed two centuries later. Especially, he insisted upon the Christian's ability to look direct to God without the mediation of any priest. He attacked the Pope and the friars, and upheld the Bible as the supreme authority for every Christian. To bring the Bible into general use, he translated it, with the aid of several friends, into English. Therefor he ranks as the founder of English prose.

His efforts failed in England. His doctrines were taken up by a sect known as the Lollards, and for a time flourished, largely among the poorer classes. But a peasants' revolt against the poverty of the times alarmed the authorities, and the heresy was suppressed. In Bohemia, however, whither travelling scholars had carried the faith, it became a powerful national religion through the leadership of John Huss. For these heresies this reformer was burned at the stake. But his popularization of the doctrines of Wycliffe lived on in Europe.

A word should also be said, to prevent misconception, of

the rise of the German mystics. The central fact of mysticism is direct communion with God, mounting to a sense of ecstatic union with him. There has always been much mysticism within the Christian Church. Saint Francis of Assisi was a great mystic before the Reformation. There were great mystics within the Church after the Reformation. Mysticism is neither Protestant nor Roman Catholic. But Germany was a particularly fruitful field for mysticism, and its leaders developed a spiritual intensity among their followers that probably aided the reform spirit when it arrived. To moderns Thomas à Kempis (*c.* 1380–1471) is the best known of these German mystics through his "Imitation of Christ,"* that has probably had a wider religious influence in Christendom than any other book save the Bible. He was a devout Catholic, of simple faith, utterly untouched by heresy.

One other great forerunner in the field of spiritual and intellectual revolt remains to be described, Erasmus (1466–1536), born a Dutchman, long a resident of other countries, and the foremost man of letters of the period. He has been called "the Voltaire of the Renaissance," and his incessant mental activity, his countless letters, and his free play of mind, point the resemblance. It was a saying of the time that "Erasmus laid the egg and Luther hatched it." But he had not the slightest sympathy with the revolt when it came. Ordained a priest, he was a man of learning above all else,

*The long controversy over the authorship of the "Imitatio Christi," one of the most celebrated disputes of literature, has ended with all the probabilities favoring Thomas à Kempis.

ERASMUS.
From the portrait by Holbein in the Louvre.

and he disliked fanaticism on any side. He was not greatly interested in dogma, and could see nothing to be gained by attacking the Church or its theology. He did attack with bitter satire the abuses of the time, the corruption of the clergy, especially the monks, and the formalism of religion.

But he hoped confidently for reform within the Church by the slow processes of education. When violent fanaticism appeared in the Reformation, he exclaimed that bishops and

MARTIN LUTHER.
From a contemporary wood-cut.

popes had been exchanged for madmen. His profile is familiar in the Holbein portrait, and his spirit lives therein, sensitive, wise, and charming.

Such were the forces, political and spiritual, which were struggling for expression when Martin Luther (1483–

1546), in 1517, nailed his theses on the church door at Wittenberg. A Dominican monk, Tetzel, was the occasion of the outburst. He had been granting indulgences in the name of the Pope in order to rebuild St. Peter's at Rome. These were pardons relieving a contrite sinner from all or part of his suffering in purgatory. They seemed to Luther, influenced by the teachings of Wycliffe and Erasmus, an outrageous example of religious formalism. In his propositions, or theses, Luther asserted what may be regarded as the central tenet of Protestant belief, that faith in God, not the purchase of pardons, or even good works, procured the forgiveness of sins. Luther was a monk and his theses were written in Latin, but they were speedily translated into German and read far and wide. Here was a very different type from the scholar Erasmus. Luther was a man of action, fired by a violent nature. Within a few years he broadened his attack to include cardinals and popes, and in a popular pamphlet called upon the German nobility to reform the Church, since there appeared to be no hope in the Pope. Luther availed himself of the economic and political antagonism to Rome by remarking upon the ease with which German money went into the coffers of the papacy and the difficulty with which it returned. This was typical of the fashion in which secular and spiritual motives were intermingled throughout the Reformation. It is impossible to say which were the more powerful.

Luther was excommunicated by the Pope, and the Diet at Worms, called by the Pope in 1521, issued an edict declar-

ing him an outlaw. But the revolt against papal authority had gone so far that no ruler sought to enforce the edict. Luther remained in hiding for a while, translating the Bible into German, and thereby setting up the first great landmark of

THE PEASANTS' REVOLT.
Peasants plundering a castle.
From a contemporary wood-cut.

modern German. Meantime the spirit of revolt gained in violence and took a sudden political turn. Luther was no radical, but his fiery attacks upon the princes and nobles incited a peasants' revolt (1525) that sacked monasteries and castles and slaughtered nobles. Luther was shocked by these excesses and he urged the rulers to put down the revolt with an iron hand. They did so with a vengeance, killing 10,000

peasants with the utmost cruelty. The serfs gained nothing. This first-fruit of religious revolt—the first of countless religious wars that were to bleed Europe for a century and more—did not halt the movement, however. The revolting princes, led by the Elector of Saxony, drew up a "protest" against an effort to revive the Edict of Worms, thereby originating the term Protestant. The Augsburg Confession, written by Luther's friend Melanchthon, gave a formal statement of this Protestant faith, and in 1555 the Peace of Augsburg ended the dispute by leaving to each German prince and each free town and each knight to choose between the Catholic Church and the Augsburg Confession. Germany had not been unified politically, and this solution left the question of faith to the rulers of the hundreds of small independent countries comprising Germany to decide. The southern rulers stood by the Pope, and Bavaria has remained Catholic to this day. Generally speaking, the northern rulers chose Protestantism.

No alternative to the two faiths was permitted, and a citizen was obliged to conform to the choice of his ruler or emigrate. Protestantism held no more freedom of conscience at this time than did Catholicism. It may be contended that in destroying the unity imposed by papal authority, Protestantism sowed the seeds of a new individualism and rationalism that made the ultimate arrival of religious liberty almost inevitable. But Luther had no real understanding of tolerance. Like the other Protestant leaders, he destroyed the authority

of the Pope to replace it with the authority of the Bible as he interpreted it. In every country the religious wars were fought not on behalf of religious freedom but to exterminate a "heresy" and replace it with the "one true faith." Religious freedom in the modern sense was a far later growth, conceived in Holland in the sixteenth century and first achieved in the American colonies. Roger Williams established tolerance for the colonists of Rhode Island in the middle of the seventeenth century, and was soon followed by the Roman Catholic colony of Maryland and the Quakers of Pennsylvania under William Penn. Rousseau and the French Revolution developed individualism to its logical conclusion in the Rights of Man in the latter half of the eighteenth century.

The Protestant Revolt culminated in Germany in the Thirty Years' War (1618–1648), the most bloody and destructive of all the many religious wars which the Revolt engendered. The fact that Calvinism was not permitted under the Peace of Augsburg was one cause of the war. Political motives helped keep the war alive. The slaughter and destruction were terrible. Gustavus Adolphus, king of Sweden, was the hero of the Protestant forces. France, under Cardinal Richelieu, prime minister to Louis XIII, joined in the warfare on the side of the Protestants in order to gain territory from Spain. The treaties of Westphalia (1648) ended the war and recognized many of the changes which had been taking place. Calvinism was accepted in Germany. The end of the Roman Empire was presaged, and France gained much

at the expense of Spain. Germany, the battle-ground of the war, was left stricken and depopulated, to face a century of convalescence.

Whether one regards the Protestant Revolt predominantly

THE PEACE OF WESTPHALIA.
From the painting by Ter Borch.

as good or as evil in its consequences, there is no mistaking the sweep of the movement and the force and originality which gave it birth. To sing Luther's hymn "Ein Feste Burg" is to feel the power of this new and primitive form of Christianity that rightly or wrongly sought to bring man face to face with his God. Except in Italy and Spain, where

Protestantism never flourished, the issues which it raised stirred bloody dispute thoughout Europe for a century after Luther's death. It is not far from the truth to say that the Protestant Revolt was Germany's Renaissance, her share in this great flowering of the European mind.

Her other contributions were slender by comparison. The invention of printing has been told. Beauty, as the artists of pagan Italy worshipped her, passed Germany by. Two artists of the first rank, Albert Dürer (1471–1528) and Hans Holbein (1497–1524), stand out as children of a Renaissance so rooted in the northern soil that it felt no need of examples from ancient Greece or Rome. Dürer's engravings speak the soul of Protestantism at its stern and noble best. Holbein's portraits rank with the greatest of all the centuries.

Politically, the Renaissance left Germany untouched. To speak accurately, there were Germanies rather than a Germany. Her map remained a patchwork quilt of small, independent countries, several hundred in number. There were the seven electors (so called because they elected the emperor of the Holy Roman Empire), three of them archbishops, one of them the king of Bohemia. There were the great duchies of Bavaria and Saxony. There were free towns like Nuremberg and Frankfort. Lastly, there were knights by the score, ruling over a few acres, a castle, a village. All owed a nominal allegiance as vassals to the emperor of the Holy Roman Empire, but so weak had that monarch become that here was no source of unity. The national assembly, called

Courtesy of R. Lesch.

ALBERT DÜRER.

From a self-portrait.

the diet, was unrepresentative and ineffective. Feudalism lived on in Germany as a nightmare, obstructing nationhood, fomenting disorder. Not till the nineteenth century were the beginnings of German Confederation achieved.

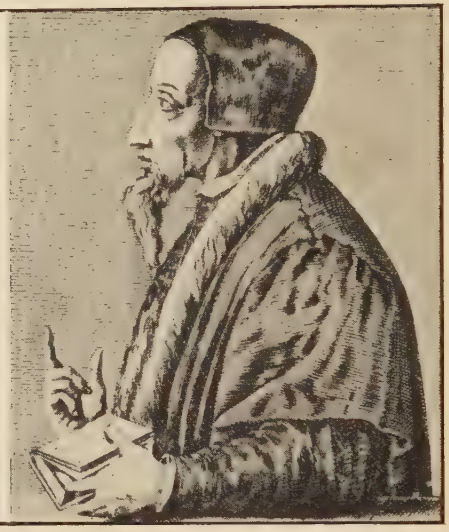
Switzerland

The story of Switzerland is closely attached to this chapter of German history. The Renaissance saw her birth as a nation; and in the same years the course of the Protestant Revolt was profoundly influenced by Swiss leadership. By sheer courage, warring over three centuries, these mountaineers fought themselves free of the Holy Roman Empire, and in 1499 became a practically independent country. The forest cantons around Lake Lucerne which led the revolt were German; Italian districts to the south and French to the west, including the city of Geneva, were added to the confederation. (The transition to a centralized federal state, of the American type, did not take place till the nineteenth century.)

A contemporary of Luther's, a German priest, Zwingli, started the revolt against the Pope, preaching in the cathedral of Zurich. Like Luther, he combined political with religious reforms. A Frenchman, John Calvin (1509–1564), carried forward the revolt in Geneva, and was destined to have a world-wide influence. In "The Institutes of Christianity" he set forth the principles of Protestantism with all the logic and clarity of the French mind. He took rank as the first and

greatest theologian of Protestantism. So powerful was his influence that the citizens of Geneva called upon him to organize their city. The theocracy which he set up outwardly separated church and state, but in fact it rigidly regulated

ULRICH ZWINGLI.
From a sixteenth-century wood-cut.



JOHN CALVIN.
From an engraving by Granthomme.

the life of every one, and subjected the state to its religious leaders. The extreme rigor of Calvin's faith was illustrated in the burning of Servetus, a Spanish reformer, who took refuge in Geneva. Death for heretics was the accepted principle of the age, and not much greater blame attaches to this execution than to any of the other thousands of executions by Catholics and Protestants alike. But the episode bears striking testimony to the intolerance of the new faith that replaced the infallibility of the Pope with the infallibility of the Bible.

It was Calvinism, not Lutheranism, that spread to France, Holland, and Scotland, and that largely colored the religious faith of the Puritans of New England. Switzerland, herself, has remained divided between Protestantism and Catholicism to this day, and her Protestants are divided between Zwingliism in the east and Calvinism in the west.

3. SPAIN, PORTUGAL, AND THE NEW WORLD

Of the nations feeling the upthrust of the Renaissance, the swiftest to flower politically were Spain and Portugal. As if by some law of nature, their decay was equally rapid. Between 1500 and 1600 they shared in the mastery of most of Europe, discovered a new world, conquered an empire, ruled the seas—and collapsed.

Spain's political history in this period touches all Europe by reason of Emperor Charles V (1500–1558), who, as the result of astute marriages through several generations, fell heir to most of western Europe, and by ability held it. This most powerful ruler since Charlemagne was less a Spaniard than a Hapsburg, a member of the ruling family of Austria. He had the projecting lower jaw of the Hapsburgs, which has persisted down to Alfonso, the present king of Spain. The manner in which the family tree of Charles V affected the government of many nations was typical of the period. Great regions passed with a wedding-ring, and dynastic quarrels caused frequent wars. This conception of peoples as part of a

dowry, as so many heirlooms, has a strange look to modern eyes. It was essentially a feudal conception, natural and inevitable to generations reared in an atmosphere where loyalty was personal and all that one asked from one's lord or king was protection. The growth of nationalism spelled its doom by developing a wider loyalty, to a region, to one's fellow citizens, to all that makes up the civilization of a nation, and ultimately elevated that loyalty above any king or dynasty of kings. But this change did not ripen till much later, with the French Revolution and the century that followed. Of a piece with this absolutism was the practice by which a ruler largely determined the religion of his people, and church and state were, as a matter of course, united.

The Holy Roman Empire, ostensible descendant of the Roman Empire, had become but a mere shell at this time. The Hapsburgs, who acquired Austria in the thirteenth century, had succeeded for a number of generations in getting themselves elected to this empty title of emperor. Charles V inherited Austria from his grandfather, Burgundy and the Netherlands (modern Belgium and Holland) from his grandmother, from his mother (daughter of Ferdinand and Isabella) Spain, and, in addition, Naples, Sicily, and Sardinia. Here was no nation but a miscellaneous collection of widely separated peoples. That Charles held them together at all was a tribute to his good sense and moderation. In ability and in dignity he was the greatest prince of his time, which comprised some of the greatest names and years of the

FRANCIS I AND CHARLES V

The two sovereigns during a period between wars inspecting the tombs of the French kings at St. Denis on the occasion of the state visit of Charles V to the court of France.

From a painting by Baron Gros, in the Louvre.

Renaissance. His contemporaries included Michael Angelo in Italy, Martin Luther in Germany, Francis I in France, and Henry VIII in England.

As emperor and a faithful Catholic he fought the Protestant Revolt, leading in the efforts to suppress Protestantism. At home, he accepted the revival of the Inquisition, and in the Netherlands he supported it with sober fervor. He warred with varying success against Francis I of France. His contacts with the Netherlands and with France belong with their separate stories. But nothing in his life compares in importance with the conquest of the Americas, which he helped carry forward to completion.

It is difficult to exaggerate the significance of the discovery of the New World. Till the voyages of Columbus no one dreamed that the Americas existed. The feat deserves all the stress that the year 1492 has gained. But no discovery of the roundness of the earth was involved. That the earth was a sphere was well known to the Greeks. Aristotle discussed the theory as accepted doctrine, citing the curved shadow of the earth upon the moon in an eclipse as proof. Eratosthenes in the third century B. C. measured the earth. The Alexandrian mathematician and astronomer, Ptolemy, in the second century A. D., measured the earth, and his conclusion, a sixth smaller than the fact, helped confuse Columbus. The mediæval church was not interested in the observed truth of the physical world, and this item of Greek science, like so many other items, was lost to sight for a thousand years by the mass

of European people. Following Saint Augustine and the other early fathers, some churchmen taught that the earth was flat, that it was absurd to think of men walking beneath us with

SPANISH AND PORTUGUESE DISCOVERIES BEFORE 1500.

their feet up and their heads down. But the rebirth of science, however slow its beginnings, had recovered the old truth for learned men.

A long line of brave voyagers preceded Columbus. Prince Henry of Portugal, called the "Navigator" (1394–1460),

was a true pioneer, and it was largely due to his initiative and imagination that the small nation of Portugal became, for a brief period, a great empire, with colonies as far away as India. His caravels, the most seaworthy of their time, and Portuguese mariners, the best seamen, rediscovered the Madeira Islands and the Azores in mid-Atlantic. They pushed southward along the coast of Africa in search of a route to the East, which had become the goal of all explorers. Spice was the chief cause of this pursuit, large quantities of which were brought overland from India and delivered by the great and prosperous fleets of Venice and Genoa. The Cape of Good Hope was rounded in 1486, in 1498 Vasco da Gama sailed to India, and in 1512 Portuguese ships reached the long-coveted goal, the spice islands of the Moluccas. These are southeast of the Philippines in the Pacific Ocean, east of Borneo. They lie beyond a continent, across an ocean, 10,000 miles distant from Lisbon via the Cape of Good Hope, yet the captains of Portugal set up an active trade with their Far East colonies, half-way round the earth. Portugal stood the first sea-power of the world, and enjoyed almost a century of fabulous wealth, that transformed Lisbon into one of the most beautiful cities of Europe. There were a number of causes of her sudden decay. The Jews and Moors, among her most industrious citizens, were expelled, the Inquisition killed, the sudden flood of gold from the colonies corrupted —Portugal and Spain suffered the same diseases. In the case of neither is it possible to be certain of causes and effects, let

alone rate their relative importance. Protestants are prone to blame the evils of both countries upon the Catholic Church, which remained supreme in the peninsula. The real cause may have lain deeper; in such basic factors as climate, or mixture of blood, of East and West. In all such speculations a conclusion is only a guess, with no pretense to scientific validity.

In the early sixteenth century Portugal possessed the greatest colonial empire in the world. Her possessions included islands of the Atlantic, Brazil, and much territory in Africa and the Far East. By the end of the century her ruling family had degenerated, her armies had been overwhelmed in Africa, she was absorbed by Spain. Logic certainly favored a single nation on the Iberian peninsula. Yet such vitality pulsed in the new nationalism of Europe, that the Portuguese revolted and fought their way back to independence, which they have ever since maintained.

While the Portuguese caravels were slowly pushing their way round the Cape of Good Hope, a Genoese sea-captain, Christopher Columbus (1446–1506), was turning his eyes in another direction. His goal was the same, the spices of the East and the gold and riches which Marco Polo had made famous. But he conceived the plan of reaching Cathay (China) and Zipangu (Japan) by steering boldly westward across the Atlantic. He seems to have known the theories of Ptolemy, and he felt no doubt that the world was round. Because Marco Polo exaggerated the distance he travelled across

COLUMBUS AT THE COURT OF ISABELLA.

From the painting by Buzik.

Asia, and because the Ptolemaic estimate of the earth's size was too small, Columbus greatly underestimated the distance

From a photograph by Brown Bros.

THE SANTA MARIA, COLUMBUS'S FLAGSHIP.
As reconstructed for the Columbian Celebration in 1893.

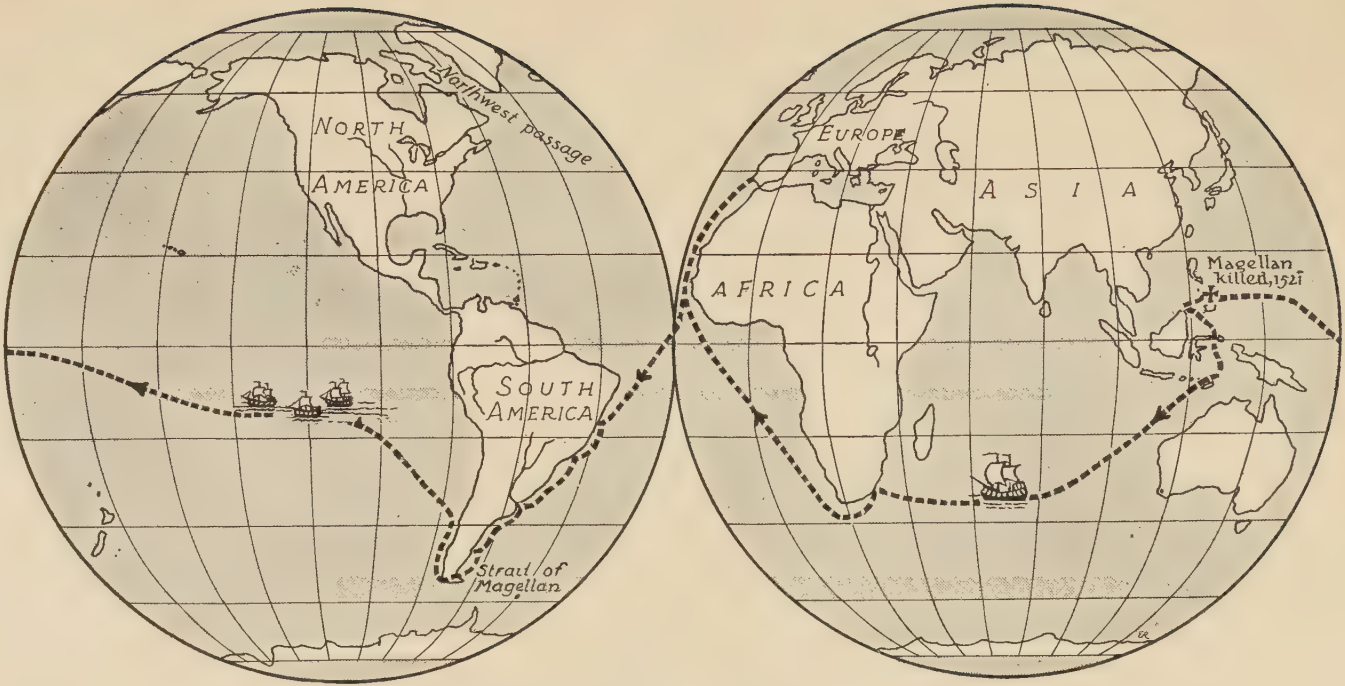
to be traversed. He never dreamed that two great continents lay between him and his goal.

He faced untold difficulties and disappointments in securing support for his hazardous adventure. Finally, he won the aid of Queen Isabella of Spain, and in 1492 sailed away over the western horizon with one decked ship, the *Santa Maria*,

and two small caravels. On the thirty-second day, after dismaying delay and threatened mutiny, he sighted land, probably Watling Island, one of the Bahamas, and, going ashore, planted the royal banner of Spain in its soil. Thereafter he discovered Cuba, which he took to be China, and Haiti, which he thought was Japan. Returning to Spain, he was received with the highest honors. Three more westward voyages he made, and, in time, reached South America, coasting along it as far as the mouth of the Orinoco. But he never realized what he had discovered, and died still believing that he had found a westward route to Asia. The mistake is perpetuated to this day in the name of the American natives, who are still called Indians, as if they were inhabitants of India, and in the name of the islands of the Caribbean, which are still called the West Indies.

CHRISTOPHER COLUMBUS.
From the statue by Paul Bartlett, in the Library of Congress, Washington, D. C.

The sea has bred bravery from the earliest times, and witnessed many desperate ventures, but none more daring than



THE MAGELLAN VOYAGE AROUND THE EARTH.

the voyage of this Genoese, an admiral of Spain, into the unknown West. His accidental discovery of a new world was far more important than the opening of any trade routes. It faced the European world in a new direction, and centred the future civilization of the West around the shores of the Atlantic.

The names of three other great captains belong here. John Cabot, of Genoese birth, living in England and acting for England, voyaged across the north Atlantic in 1497 to the mouth of the St. Lawrence. The next year he coasted farther south. He discovered the mainland of North America, and upon his voyages the English claims were based. He, like Columbus, thought he had reached Asia, and so reported. In 1513, Balboa, a Spanish adventurer, marched across the Isthmus of Darien (now Panama) and discovered the Pacific. He heard of the riches of Peru and planned to sail down the west coast. By his ability and kindness he won the support of the natives, but was killed by a rival Spaniard. Hardly less daring than the first voyage of Columbus was the voyage of Ferdinand Magellan, a Portuguese in Spanish employ, across two oceans and around South America. His expedition, starting in 1519, passed through the treacherous straits which bear his name and circumnavigated the globe, returning to Spain. He was slain by natives in the Philippine Islands. If any one still doubted that the world was round, the voyage of Magellan ended these doubts. More important, he made it clear that America was no island but a great continent. The vast scope of Columbus's discovery became apparent.

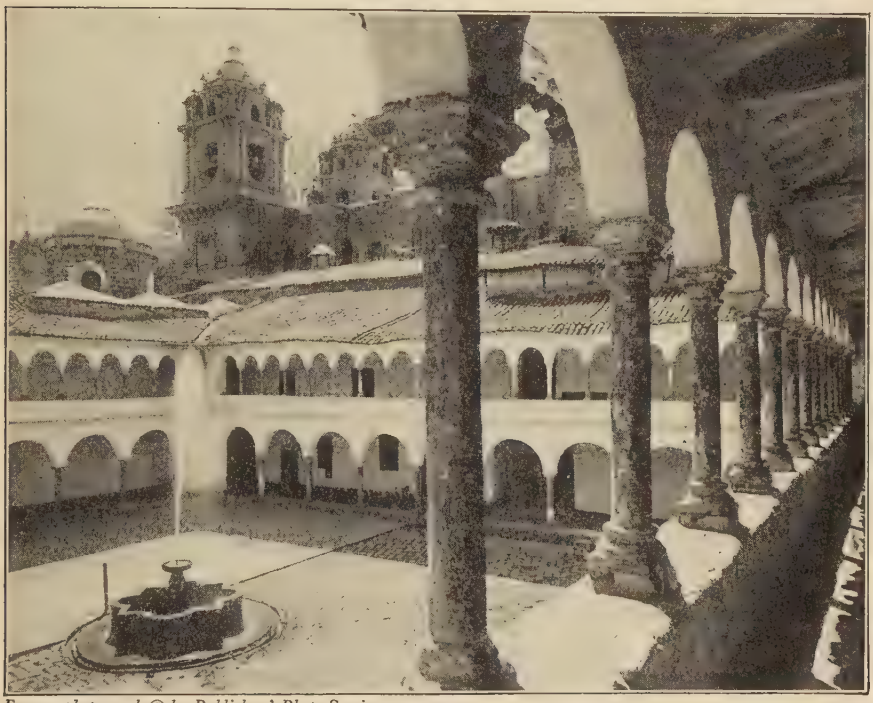
The Spanish conquest of its part of the New World was swift and ruthless. It preceded by a whole century the slower British and French explorations to the north. As will be seen, the conquests of these latter nations were true colonies, settled by Europeans, and they prospered and endured as outposts of European civilization. The Spaniard's goal was different. He sought riches that he could carry home, the quick profits of the raider. There were various reasons for this divergence. Climate furnished a principal one. Madrid is in the latitude of New York, but owing to the trade-winds the Spanish explorers usually fetched up in the Caribbean. As a result, most of their colonies were in the tropics. The Spanish Main meant originally the mainland of South America from the Orinoco to Panama. Later it was applied to the Caribbean Sea itself, in which or around which the Spanish explorers operated. The problem of white settlement in most of these regions is still difficult.

Cortez was the greatest of the Spanish conquerors in America. He entered Mexico in 1519, and by audacity, military genius, and some cruelty subdued with a few hundred Spanish soldiers the whole empire. A decade later Peru fell to the less able and more unscrupulous and cruel Pizarro. From both conquests vast riches flowed back to Spain, for each country possessed an old and considerable civilization, far in advance of the rest of the natives of America, and deserving to be compared with the period of the Great Pyramids in Egypt. In both countries the older civilizations, so

laboriously built up over the centuries, were ended. The only solid effort to replace them with a new civilization was the

missionary labor of the Spanish priests. Here was the bright side of the Spanish conquest. Priests not only toiled for Christianity but sought to curb the horrible cruelties of slave labor in the mines. The whole story of the Spanish adventure in America is bespattered with blood. It is to be recalled, how-

ever, that the age in Europe was one of cruelty and that the Spanish were the most cruel of Europeans—the Inquisition, for example, was most effectively used there. At least, the



From a photograph © by Publishers' Photo Service.

THE MONASTERY AT CUZCO, PERU, BUILT BY THE SPANISH CONQUERORS ON THE SITE OF THE INCA TEMPLE OF THE SUN.

Spanish conquerors treated their American victims with no more barbarism than they treated their heretics at home.

It seems incredible that so great an empire could decline so swiftly. Yet in 1588, when the Spanish Armada failed disastrously in its attack upon England, her star was already setting. The forces which worked the undoing of Portugal

beset Spain as well, along with an alien rule—that of the successors of Charles V, Hapsburgs all—which brought her into conflict with most of Europe and bled her white.

The Protestant Revolt made little headway in Spain, and, thanks to the initiative of Charles V, she became the sword of the Counter-Reformation, the response of the Catholic Church to Protestant attack, comprising an effort to reform the Church from within and the suppression of heresy. The Council of Trent (1545–1563) was called by the Pope in the midst of the Reformation in an endeavor to prevent a schism. It failed to achieve this end, but it established some practical reforms in the Church, while reaffirming the old faith unchanged. To repress heresy it created the famous "Index of Prohibited Books," to which a committee of church censors to this day condemns heretical works. A Catholic is forbidden to print, circulate, or read a book on the "Index."

The greatest factor in the Counter-Reformation was the Jesuits, a new religious society, founded by a Spaniard, Ignatius Loyola (1491–1556). He was a contemporary of John Calvin and applied the same ruthlessness to the support of his belief. Trained as a soldier under Charles V, he set down obedience as the first rule of his order, and the Jesuits became the best disciplined and most efficient of priests. They were preachers, teachers, missionaries, carrying the old faith around the world. It was Jesuit priests who entered Mexico and Peru and who, later, were among the first white men to

IGNATIUS LOYOLA.

From an engraving after the painting by Peter Paul Rubens.

explore Canada and the region of the Mississippi. Protestants have been slow to do justice to these noble and courageous followers of Ignatius Loyola. Their opinion was formed

upon observation of certain later Jesuits who developed the conception that religion should be made as comfortable and beautiful as possible. A considerable part of the later Counter-Reformation was built on this idea, in sharp contrast with the sterner morality of Protestantism that reached its own extravagances at the opposite pole in the repression of all beauty and pleasure. A gorgeous architecture was developed in the Jesuit churches, casuists discovered convenient excuses for sins, and commercial adventures caused corruption. The order was suppressed by the Pope from 1733 to 1814.

The record of Spain in art and literature is singular. There was no broad stream of achievement, save in drama, the chief popular art of Spain; yet Velasquez (1599–1660) was probably the greatest of all painters in sheer technic and, much later, Goya (1746–1828) made a highly individual yet not less extraordinary contribution to European art; Cervantes (1547–1616) in "Don Quixote" wrote one of the greatest of prose satires, ridiculing the romantic excesses of chivalry in the Middle Ages. The Prado at Madrid is one of the greatest art museums in the world. The cathedrals of Spain combine Gothic beauty with a richness of color and design that is glorious and unique. The Renaissance in Spain, supported financially by the gold of the Spanish Main, created much lofty beauty, inspired by Greece and Rome, yet essentially Spanish in its development. Slender as is this intellectual and artistic record of Spain, its few outstanding geniuses must be ranked with the greatest the world has

Courtesy of Rudolf Lesch.

THE LADIES OF HONOR, BY VELASQUEZ, IN THE PRADO, MADRID.

Velasquez himself stands before his easel at the left of the picture, painting portraits of Philip IV and Queen Mariana, which are seen reflected in a mirror. The Infanta Margarita Maria stands between two of her ladies of honor, while at the right two dwarfs are playing with a dog.

THE FORGE.

From the painting by Goya, in the Frick Collection.

known, yet distinguished from them by a virile intensity, at once passionate, proud, cruel, and melancholy. Influencing this Spanish tradition was the Moorish architecture, preserved at its best in the Alhambra at Granada, one of the great architectural glories of the East in Europe. No better proof could be given of the existence of some essential difference between Europe and Asia or Africa than the contrast of this structure, varicolored and delicate, erected on the Iberian Peninsula, with the more forthright structures of Gothic and Renaissance Europe. The Spaniards succeeded in driving the Moors out of Spain; they could not destroy entirely the inheritance of the centuries during which the East and the West there lived together.

4. THE LOW COUNTRIES, HOLLAND AND BELGIUM

The history of the Netherlands,* or Low Countries, is closely related to that of Spain during this period. The relationship is one of constant warfare and utter contrast. It saw the splitting of the Netherlands into two countries, one Protestant, one Catholic, and in the former a heroic war of independence that resulted in the first beginnings in Europe of republican principles and religious tolerance. The small country of Holland, the size of Maryland, was a pioneer of freedom for the whole Western world. At the height of her

*Netherlands is the ancient name for the region which is now Belgium and Holland. The kingdom of the Netherlands became the official name of the northern part, called, inaccurately but conveniently, Holland in English usage. Holland is really the name of an ancient county and modern province forming part of the kingdom of the Netherlands.

2nd CHART THE RENA

I S S A N C E — POLITICAL EVENTS

FRANCE		ENGLAND		OTHER COUNTRYS	
					1700
War of Spanish Succession		Revolution	WILLIAM MARY	Defeat of the Turks at Zenta	
			JAMES II.	Vienna besieged by the Turks	80
Revocation of the Edict of Nantes	LOUIS XIV.	Philadelphia founded by Penn 1682	CHARLES II.		
ABSOLUTISM		CROMWELL	COMMON WEALTH	Venice - turkish war	60
Treaty of Westphalia 1698		Rump parlament			
Mazarin minister		Long parlament	CHARLES I.		40
Richelieu, prime minister	LOUIS XIII.	Pilgrims land at Plym'th			
		Petition of rights	JAMES I	Gustavus Adolphus	20
Quebec founded by Champlain				Romanov dynasty in Russia	
		EAST INDIA COMPANY			
Edict of Nantes 1598	HENRY IV.	Persecution of the Separatists			1600
War of the three Henries	Valois	Raleigh's colony of Virginia			
		Spanish Armada defeated			
	HENRY III.	Execution of Mary of Scotld	ELIZABETH		80
St Bartholomew's Eve 1672				Battle of Lepanto 1570	
Catherine de Medici.	CHARL. IX.				
		Catholic restoration		Frederick II of Denmark	60
	HENRY II.		MARY	Ivan the Terrible	
			EDW VI		
Cartier sails up the St. Lawrence		Church of England. 1534		Suleyman the Magnificent	40
Francis taken as prisoner 1525	FRANCIS I.		HENRY VIII	Conquest of Hungary by the turks	
		Wolsey cardinal		Gustavus Vasa king of Sweden	20
ITALIAN WARS	LOUIS XII.				
					1500
Conquest of Milan 1499	CHARLES VIII.	Voyages of Cabot	HENRY VII.		
		Murder of the princes in the Tower	RICH. III	Ivan III. of Muscovy liberates Russia from the Mongols	80
Annexation of Burgundian possessions	LOUIS XI	WARS OF THE ROSES	EDW. IV.		
Burgundian wars			York / Lancaster		60
		End of the Hundred Years War 1438		Fall of Constantinople	
	CHARLES VII.		HENRY VI.		40
Joan of Arc executed 1431					

RAILE

power, she won a great colonial empire overseas, which she never entirely lost. The southern region of Flanders, now a part of Belgium, was a pioneer in art for the whole of Europe, and the artistic achievement of both countries ranks with the greatest.

It will be recalled that when Charlemagne died, his empire was split among his three sons, and that a middle kingdom was created running from Italy to the North Sea and including the territory of Alsace and Lorraine, which has long been in dispute between France and Germany. This long, narrow empire held no possibility of permanence, yet the conception has refused to die, possibly because of the political convenience of a buffer state, possibly because of racial and linguistic facts resulting from the mixture of Teuton and the older stocks which made these intermediate peoples restless members of either the Eastern or Western Empires.

In this region Switzerland had already achieved its unique independence as a trilingual state. The Netherlands might conceivably have attained a similar unity. Partly owing to the bitterness of the religious issue, the region split into two buffer states, the one Protestant and speaking a Teutonic language, the other Catholic and speaking French or Walloon, another Romance tongue. Thanks to Napoleon, they were united in the nineteenth century; but the old cleavage prevailed. The rise of these two small nations is typical of the strange and important development of nationalism throughout Europe during the Renaissance. Race, religion, dynasty,

geography, language, heroes, all played their part. This is the story of the changes that created these two small nations in the north, corresponding to Switzerland in the south, out of the old middle kingdom of Lotharingia.*

The fifteenth century saw a bold effort to revive this old Carolingian unit under Philip the Good of Burgundy. To this prosperous region of eastern France was united through marriage the county of Flanders on the North Sea, thanks to its weavers, the richest spot in Europe. By the thirteenth century the Flemish towns of Ghent, Bruges, and Ypres had grown to be large industrial cities, ruled in democratic fashion through their trade guilds. The rest of the Netherlands was added to the Burgundian possessions and the whole subdued by the ability and statesmanship of Philip. The dream of a revived middle kingdom, stretching from the Mediterranean to the North Sea, loomed as a real possibility. But the next duke, Charles the Bold, by his own rashness, and through the slow wiles of Louis XI of France, met disaster, and the house of Burgundy lost its chance. As has been seen, Burgundy and the Netherlands fell into the Hapsburg lap of Charles V.

Born in Ghent, the young emperor began his rule with sympathy and moderation. But as Calvinism gained ground, especially in the northern provinces of the Netherlands, the emperor directed an increasing rigor toward heretics. The

*The part of the kingdom that bears its ancient name in modern form, Lorraine, lies in the disputed territory.

Inquisition was applied with a vengeance. By the reign of Philip II religious excitement became so intense that bands of Protestant iconoclasts raided the churches, smashing altars

A MASSACRE BY ORDER OF THE DUKE OF ALVA.
From a sixteenth-century wood-cut.

and breaking images. There was, however, no bloodshed, as in the peasants' revolt in Germany. In consequence of the outrages upon the churches, the great Spanish general of his time, the duke of Alva, was sent to crush this revolt and extirpate heresy. There followed probably the most cruel and

murderous of religious persecutions that the Reformation set in motion. "The Council of Blood" was the popular name for Alva's religious court. Thousands of Protestants were burned, beheaded, or hanged.

The revolt of the Netherlands developed into the most desperate and prolonged of all struggles for freedom. This small people set to work to shake off the tyranny of the greatest empire since Charlemagne's. The contrasts with the American Revolution are many, but in one respect there was a close resemblance. The Dutch revolution owed its success largely to one man, William of Orange (1533–1584), called William the Silent, who in height of inches and of moral character, of iron will and fearlessness, suggests both the person and the rôle of Washington in the American Revolution. The warfare was picturesque and heroic. The first successes of the Protestants were won by the Sea-Beggars, corsairs outfitted by William, who raided and captured ports with the seamanship that was to make Holland for years the greatest sea-power of the world. Three historic sieges, of Haarlem, of Alkmaar, and of Leyden, marked the turn of the struggle. In all, the battle was waged on sea and land. Haarlem fell to the Spanish after a winter of bravery, starvation, and death. Alkmaar was saved by cutting the dikes and threatening the invaders with drowning. The fate of Leyden hung in the balance for months, and the city finally was rescued by a fleet manned by the Sea-Beggars, who sailed inland through breaches in the dikes, and at the last, des-

perate moment were aided by an equinoctial storm that piled the North Sea high over the lowlands of Haarlem. As in the American Revolution, there were many dark days, and victory seemed a forlorn hope. In 1579 the Union of Utrecht was signed by the northern provinces, and the Dutch became in fact a free nation, sworn to resist foreign tyranny and to uphold religious freedom. In the same year the southern provinces united in the name of Catholicism. The battle was by no means over, and in 1584 the cause suffered an irreparable loss through the assassination of William the Silent, "The Father of His Country." It is related that the children wept in the streets when he died. But by this time the rising sea-power of England had become engaged in a death-grapple with Spain, and the destruction of the Spanish Armada in 1588 aided the cause of Holland. Her ultimate independence was certain, and in 1648, by the Peace of Westphalia, the eighty years' war came to an end.

In this seventeenth century the Dutch nation came into commercial conflict with England. The Dutch East India Company established trading-posts from the Cape of Good Hope to Japan. The Dutch West India Company conquered a large part of Brazil. Henry Hudson, an English captain, searching for the northwest passage, on behalf of the Dutch East India Company, sailed up the Hudson River in 1609, and in 1626 New Amsterdam was founded on Manhattan Island where New York now stands. Dutch fur traders did a thriving business with the Indians of New York and the

THE ADORATION OF THE LAMB.

From the altar-piece by Jan and Hubert Van Eyck at St. Bavon, Ghent.

surrounding region. These were the golden years of Dutch supremacy, commercial and naval. She was the wealthiest and most civilized country of Europe. In the series of naval battles with England that followed, the Dutch admirals Van

NEW AMSTERDAM.

From the earliest representation known, in "Beschrijvinghe Van Virginia, Nieuw Nederlandt & Englandt," 1651.

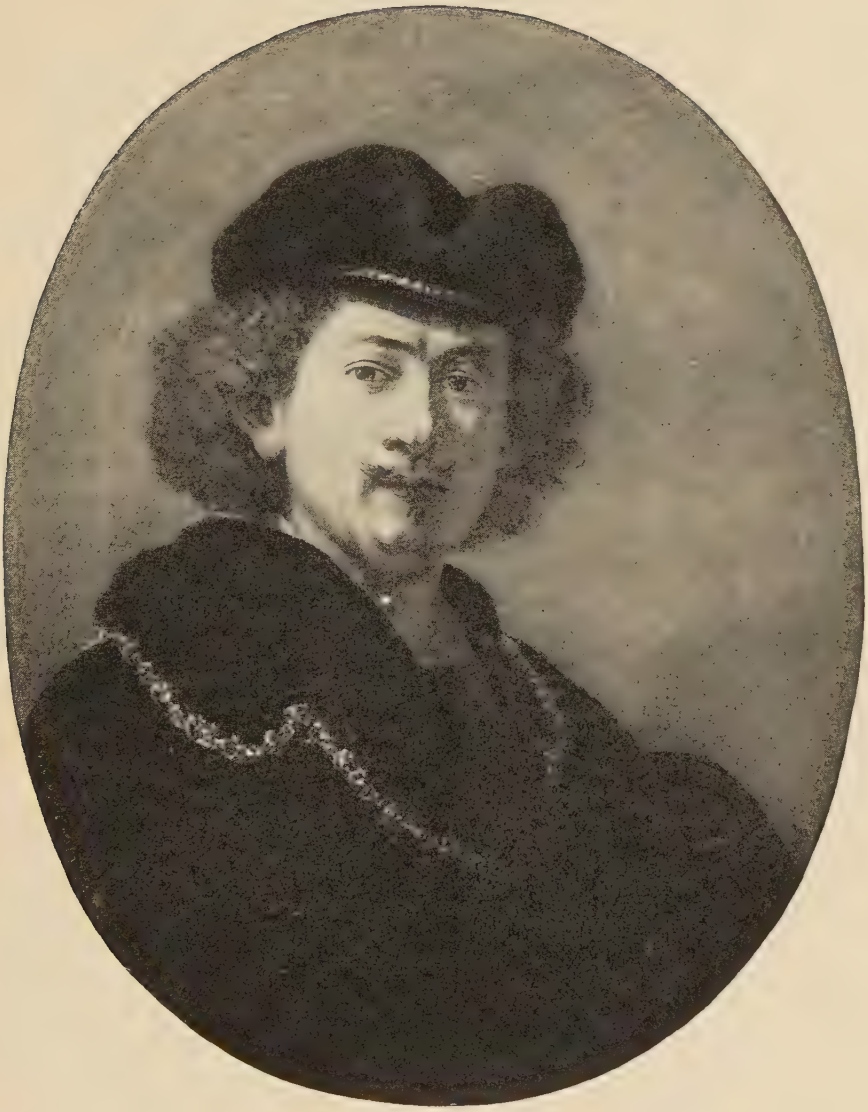
Tromp and de Ruyter long held their own, sailing the British Channel with brooms at their mastheads, and it was not until nearly the end of the century that the supremacy of British fleets was finally established and the decline of the Dutch colonial system began. (New Amsterdam was, however, lost to the Dutch in 1664 during the first naval war with England.)

The artistic record of the Netherlands begins in Flanders.

Here soon after 1400, in the work of Jan and Hubert Van Eyck, the north led the south. Their altar-piece at Ghent, "The Adoration of the Lamb," ranks as one of the greatest of all pictures. This was clearly a revival of mind and imagination untouched by Greece and Rome, a suggestion of what the Renaissance might have been if no Revival of Learning had occurred. Fidelity to truth is an outstanding quality of these early Flemish painters and of the great line that descended from them. Through Dijon and Bourges in Burgundy, the Flemish example influenced France and reached Italy.

The new nation of Holland produced in the seventeenth century one of the greatest of all painters and etchers, Rembrandt (1606–1669), well reflecting the severer and more democratic outlook of this Protestant and independent people. A long list of great seventeenth-century Dutch painters could be added, worthy to rank with the greatest Italian—Hals, Vermeer, Ruisdael, among others. In Catholic Flanders the great Rubens (1577–1640) flourished in the seventeenth century, strongly influenced by Italian example, yet individual and northern in his robust, sensuous style. His pupil Van Dyck carried forward his tradition of great portrait-painting.

Let it be added that Erasmus, the greatest man of letters of his time, was a Hollander, and it can be seen how varied and precious was the yield of the Low Countries to European civilization.



REMBRANDT.

From a self-portrait, now in the Louvre, Paris.

5. FRANCE

Nowhere did the Protestant Revolt cause so protracted and deadly a combat as in France. Perhaps the mingled racial strains of her people were more nearly in equilibrium than elsewhere in Europe. Geographically, too, she was the one nation uniting the Mediterranean and the North Sea. For these, or for whatever reasons, the forces that supported and opposed the Revolt seem to have been more nearly equal than elsewhere. Nor does the result, the failure of Protestantism to convert a majority and the final sweeping Catholic victory, necessarily contradict this view. For from the long warfare the Gallic Church and the French people took a unique independence of Rome, which they have never lost.

That the issue was fought out to a final devastating decision was in large part due to the growing absolutism of the French monarchy, which at the end would brook no compromise. As in every other country, the questions of faith there became hopelessly involved with the ambitions of rival princes. It was the additional ill fortune of France to produce but one great king, Henry IV, during this long period of trial. Extreme absolutism had a long test in France and failed miserably, richly earning the judgment meted out by the French Revolution.

A far-seeing monarch, Louis XI, united the French nation by his patient cunning. He was succeeded by a line of pleasure-loving princes of the Renaissance, relics of the days

of chivalry, who could think of nothing better to do than to keep their country at war. These were the great days of the Italian Renaissance, and it was in the direction of Italy that these monarchs turned alike for art and conquest. Charles VIII led an army into Italy to annex Naples. That hopelessly divided country made no resistance, and Florence, under Savonarola's rule, at first welcomed him. But incompetence deprived him of his conquests and he retired in a hurry with nothing gained. Louis XII (reign: 1498–1515) possessed more ability and an affection for his people, but he, too, wasted a lifetime warring in Italy. He conquered and held Milan, and thereby Ludovico Sforza, "the Moor," died in a French dungeon at Loches. But in the end the Pope called in Spaniards, Germans, and Swiss in a Holy League, and Louis XII died with nothing won.

There followed Francis I (reign: 1515–1547), a kingly, spoiled child, the contemporary of Emperor Charles V and Henry VIII of England. He won a brilliant victory over the Swiss mercenaries of the Pope at Marignano (1515). Thereafter he waged a long and losing struggle against Charles V, who after one victory took him to Madrid as his prisoner and forced him to sign a humiliating treaty. At home he increased the powers of the king at the expense of both Church and nobility. After some hesitation, he repressed with increasing rigor the growing body of Protestants who wished to adopt the faith of their countryman, Calvin. Handsome, frivolous, and vacillating, he deserves to be remembered

FRANCIS I OF FRANCE.

From the portrait by François Clouet, in the Louvre, Paris.

chiefly as a patron of the arts. He brought Benvenuto Cellini and Leonardo da Vinci to Touraine, and strengthened the already considerable influence of Italy upon French art and letters.

The next group of weakling monarchs, the last of the Valois, are famous chiefly for the women associated with their careers. Henry II is less well known than his beautiful though elderly mistress, Diane de Poitiers—she was twenty years his senior—and his astute and ambitious Italian wife, Catherine de Medici. Francis II married Mary Stuart, Queen of Scotland, and died. Charles IX and Henry III were alike ruled by their mother, Catherine de Medici, who was at times tolerant toward the Protestants when she needed their political aid, but at times became their bitterest enemy, and among other slaughters contrived the appalling massacre of Saint Bartholomew's Eve (1572), which slew several of the Huguenot leaders and probably 10,000 Protestants in Paris and the provinces. This degenerate house of Valois came to an end and the slate was cleaned for better times when Henry III had his chief rival, Henry of Guise, stabbed to death in the Château of Blois, and was, himself, assassinated within a year (1589). Throughout these wretched reigns a succession of eight religious wars drenched France in blood. The French followers of Calvin were called Huguenots, and they formed a powerful political as well as a religious party, including a number of great nobles, among them Admiral Coligny. The fortunes of the battle swayed to and fro; tolerance was won for the Huguenots, only to be lost.

The one great king of the time, Henry of Navarre (reign: 1589–1610), who reigned as Henry IV of France, descendant of Saint Louis and the first of the Bourbon dynasty,

THE BATTLE OF MARIGNANO AND THE ITALIAN CAMPAIGNS OF FRANCIS I.

From a bas-relief by Pierre Bontemps on the tomb of Francis at St. Denis.

brought to France a twenty-one-year breathing spell of religious peace and material well-being. He looked a king and was a king. His boyhood had been spent in the province of Bearn, in the southwestern corner of France (the ancient kingdom of Navarre included territory on both sides of the

CATHERINE DE MEDICI.

From a painting of the sixteenth-century French school, in the Louvre, Paris.

Pyrenees). Plain fare and a rough outdoor life brought him to ripe manhood, sturdy, alert, and brave to the point of recklessness. He was a king on horseback, a dashing captain of cavalry, and the first years of his reign were passed in overcoming his enemies. He had been born and brought up a Calvinist, but finding that Paris and the bulk of the nation were resolute for the old faith and that he could never hope to reign as a Protestant, he made his peace with the Pope and joined the Catholic Church. "Paris was worth a Mass," he observed.

The religious wars following so soon on the Hundred Years' War left France in a pitiable plight. Henry devoted his reign to upbuilding the nation, aiding agriculture and commerce, building roads and canals, dismissing useless officers of the government, and reforming the national finances. The honest and thrifty Sully, a Protestant, was his right hand in this work. By the Edict of Nantes (1598) he kept faith with his old coreligionists by proclaiming toleration for Protestants, with equal rights of citizenship, and the right to hold services where they had already been held, Paris and certain other towns excepted. There was slow but real progress in these years, and Henry IV deserves the affectionate regard in which he has been held by Frenchmen. Yet his last years were clouded by fantastic war-making and love-making, and his death by an assassin's knife exhibited one more weakness of the monarchical system, the uncertainty of its rule, whether good or bad.

The next 105 years, from 1610 to 1715, were spanned by two kings, Louis XIII and Louis XIV, the latter ruling fifty-four years, one of the longest reigns in European history. Two churchmen, Cardinal Richelieu and Cardinal Mazarin, serving as prime ministers, dominated the first half of this period. The former was a Frenchman, pitiless, cunning, able, pursuing tirelessly the welfare of the realm through the policies which he believed in. Chief of his difficulties was the fact that the king disliked him, and much of his time was spent in tactfully persuading Louis XIII to his views. At home he sought to make the royal power supreme; abroad he carried on the policy of endeavoring to crush the Hapsburg rulers of Spain and Austria, which Francis I had initiated and Henry IV seconded. So unswerving was his political conviction of the necessity of humbling the Hapsburgs that he entered the Thirty Years' War against Austria and Spain on the Protestant side. He subsidized Gustavus Adolphus and finally declared war. He did not live to see the victory that came. Mazarin was a Sicilian, and he came to power by courting Anne of Austria, Louis XIII's Spanish widow, who as queen mother became regent when Louis XIV, at the age of five, succeeded to the throne. He was the lesser of the two cardinals, ruling by guile rather than personal force. Yet he carried the policies of Richelieu to a successful end, though a foreigner, faithfully serving France. By the treaties of Westphalia (1648) and the Pyrenees (1659) the Hapsburg dream of power was ended and France took the leadership on the continent.

THE ENTRY OF HENRY IV INTO PARIS.

From an engraving after the painting by Gérard.

The reign of Louis XIV was typical of the late Renaissance, of the natural tendency of a great period to end in formalism, seeking to make up for what it lacks in true creative spirit by elaboration and splendor. Louis was handsome, industrious, and took his task seriously. He carried absolutism to its logical completion, accurately expressed in the famous declaration often ascribed to him, though there is no proof that he ever said it, "L'état, c'est moi," the equivalent of the English "I am the state." He ruled with a heavy, golden splendor that yielded more bourgeois pomp than aristocratic dignity, more magnificence than beauty. The palace of Versailles is a true symbol of his reign, vast, elaborate, and stiff. The cost of his magnificent court was a terrible burden on the nation, and when Louis died, the people of France were once more oppressed and starving.

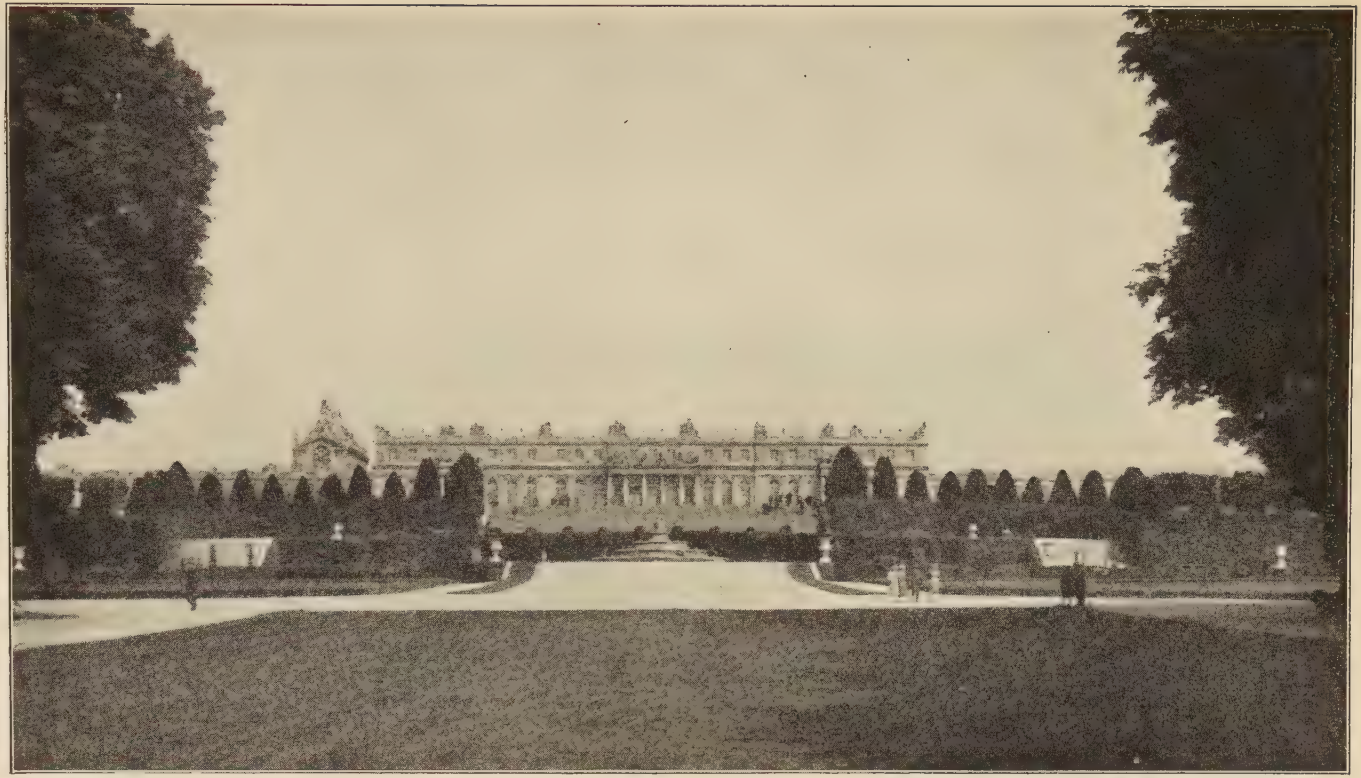
Perhaps the worst disservice that Louis did his country was the revocation of the Edict of Nantes (1685). The lot of the Protestants became increasingly difficult after the death of Henry IV. It remained for Louis XIV to renew active persecution and finally drive the great mass of Protestants out of France, many of them across the Atlantic to America. They were well-to-do, industrious, among the best citizens of the country. Their loss was a severe blow. Louis's decision was influenced by Madame de Maintenon, whom he married secretly after the death of Queen Maria Teresa. She was a devout Catholic, and the last years of the king's reign were passed in religious gloom, very different from the brilliant gaiety in which it began.

In addition Louis waged a series of costly wars of conquest that wrecked the finances of the country despite all that his able minister, Colbert, could do. He tried to conquer Holland and failed. He sought Spain, and the War of the Spanish Succession had its echoes in Queen Anne's War in America between the French and English colonists. By this time England had taken the lead of the coalition in the fight against Louis's grandiose ambitions, her armies commanded by the famous duke of Marlborough, a brilliant courtier and an able general. When peace came at Utrecht in 1714 it was unfavorable to France. The power which Richelieu and Mazarin had built up so laboriously was hopelessly compromised by the time of Louis's death.

Among the losses was part of the French colonies in America, gained over many years by bold voyagers. A band of Huguenots sought to found a colony first in South Carolina, then in Florida (1562–1565), but both failed, the latter group massacred by the Spanish. Other French explorers turned north to waters where their Breton sea-captains had already fished. Cartier sailed up the St. Lawrence as far as Montreal in 1536; Champlain made the first permanent settlement at Quebec in 1608; Jesuit missionaries pushed westward in their zeal for converts, Father Marquette reaching the upper Mississippi in 1673; La Salle explored the Mississippi valley to its mouth in 1682, naming the great territory on either bank of the river Louisiana in honor of Louis XIV. The French were explorers and traders rather than colonists.

CARDINAL RICHELIEU.

From the painting by Philippe de Champagne, in the Louvre, Paris.



From a photograph by Burton Holmes © Ewing Galloway.

THE PALACE OF VERSAILLES, FROM THE GARDEN.

They built a chain of sixty forts stretching along the Great Lakes from the St. Lawrence to the mouth of the Mississippi, founding thereby Detroit, Chicago, and St. Louis among

CHAMPLAIN ATTACKS AN INDIAN FORT.

From an engraving after the wood-cut in Champlain's "Nouvelle France."

other towns. Their fur traders were a bold and hardy breed, but they made comparatively few permanent settlements. When the clash with the English came, they were greatly outnumbered. The blundering wars of Louis XIV lost Nova Scotia, Newfoundland, and the Hudson Bay region to England, and in 1759 the defeat of Montcalm by Wolfe on the

Plains of Abraham before Quebec ended New France for all time. When peace was made, the English advanced their western boundary to the Mississippi, Spain taking the Louisiana territory to the west. The story of France from 1685, the date of the revocation of the Edict of Nantes, forward is one of external decline, lasting till the rise of Napoleon a full century later.

RABELAIS.

From the only contemporary portrait known, in "Le Théatre d'Honneur," 1623.

The Renaissance produced no more typical offspring than Rabelais (*c.* 1490–1553). A monk, a wanderer about France, a physician, he wrote in his "Gargantua and Pantagruel" the perfect expression of these fresh and joyous years. The heroes are two giants, and the fantastic tale of their adventures laughs at the shams and hypocrisies of the age—the ignorance and immorality of the monks, for example—and sets up a brave and joyous ideal of life, full-blooded, kindly, and reverent. His language is coarse and his style inchoate; his philosophy presents the Renaissance at its noblest. Marguerite d'Angoulême,* queen of Navarre, was not less the

*She was the sister of Francis I, the grandmother of Henry IV, and the great-aunt of Marguerite of Valois, popularly known as "La Reine Margot," Henry IV's first wife, with whom she is often confused.

LOUIS XIV AND MOLIÈRE.

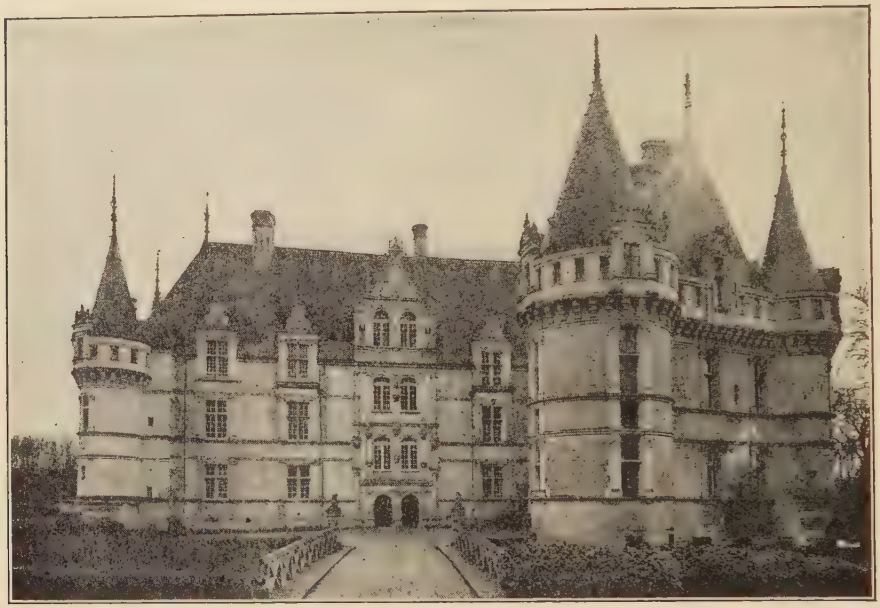
From the painting by J. L. Gérome.

Renaissance. Protector of Rabelais and disciple of Erasmus, a mystic and a Protestant, she wrote the delightful and ribald tales of the "Heptameron" (after the manner of Boccaccio). In France, as in Italy, the day of the lady, as learned as she cared to be and as powerful as her talents enabled her to be, had arrived. The essays of Montaigne (1533–1592) belong farther along the road, holding to the old faith, yet ever sceptical. There was no subject to which he did not turn his searching, inquiring mind. The art of living was his concern, and his practical, pragmatic point of view, taking wisdom and aid wherever he could find them, explains much of the heart of France.

In the seventeenth century the thrust of the Renaissance is still to be felt in the dramas of Corneille, Racine, and Molière (1622–1673). The farces of the last descend from the great tradition of Rabelais, and rank with the masterpieces of literature. Not all the classic formalism of the court of Louis XIV could fetter this great genius. The same originality speaks in the fables of La Fontaine and the "Pensées" or "Thoughts" of Pascal, the intellectual leader of Jansenism, a religious movement within the Catholic Church that resembled Protestantism in its belief in salvation through grace, and was crushed as a heresy by Louis XIV. That monarch aspired to be a patron of all the arts, but his influence was seldom helpful. Of more importance was the founding of the French Academy by Richelieu in 1635.

There was no achievement in painting to match these lit-

erary monuments save in Burgundy—where the great Flemish tradition prevailed. The influence of Italy was strong elsewhere, and in the time of Louis XIV a slavish classicism



THE CHATEAU OF AZAY-LE-RIDEAU, BUILT IN 1518, AND OFTEN VISITED BY FRANCIS I AND HIS COURT.

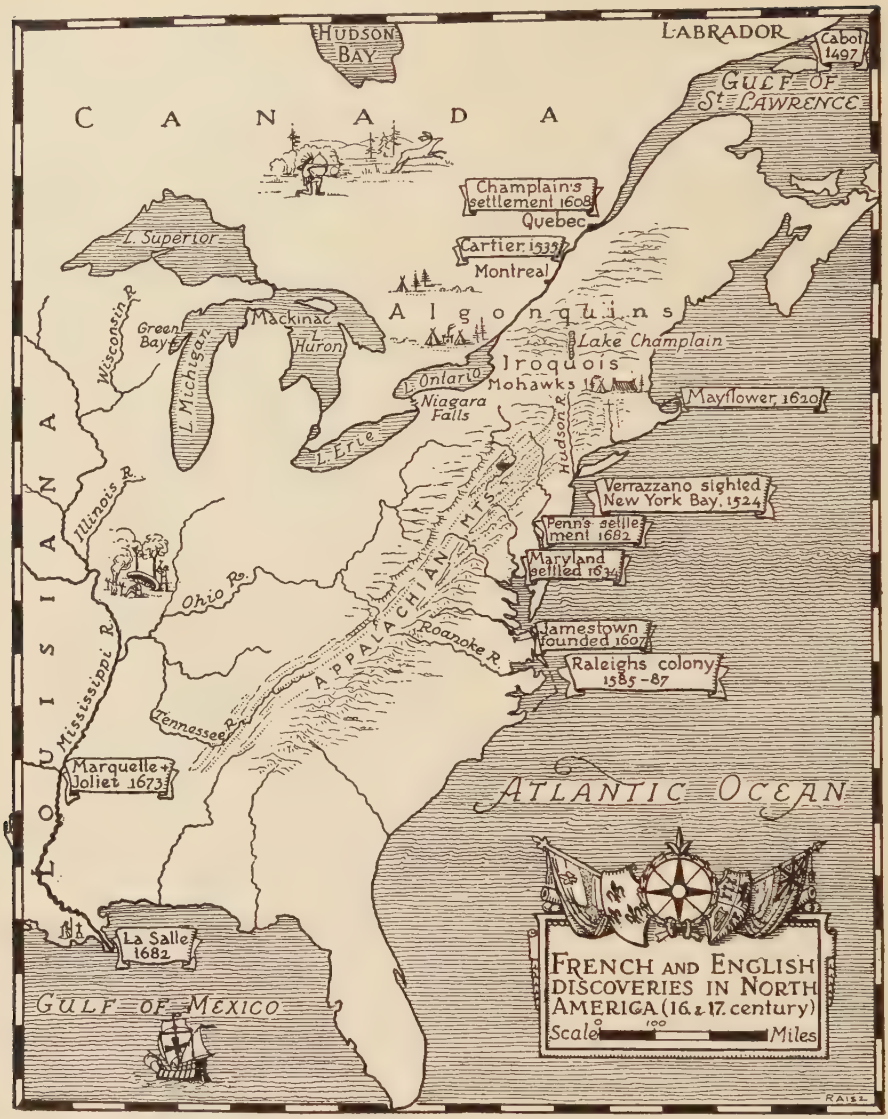
It is considered one of the finest examples of French Renaissance architecture.

arrived that produced solemn and uninspired structures like the Palace of Versailles. In sculpture Jean Goujon created a delicate and Gallic beauty, and in architecture the exquisite châteaux of the Loire, the loveliest palaces in the world, built in the sixteenth century by Francis I among others, display every stage of the Renaissance, and are a vivid record of the mounting influence of Greek and Roman models upon the old French Gothic styles. Typical of the overelaboration

which often marks an art that has passed its prime was the baroque style of architecture developed in the seventeenth century at the same time as the Jesuit effort to make religion more appealing and agreeable. The word is often used interchangeably with rococo, but the latter belongs more properly to a later development, to the delicate and graceful curves of the Louis XV furniture and decorations of the eighteenth century. The spirit of the earlier baroque was rich and heavy, often clumsy. Both styles share the weakness of treating decoration as an end in itself instead of an expression of form, and there is a suggestive analogy in the flamboyant Gothic which also appeared at the end of an architectural period. It needs to be remembered, however, that genius can do great work in any age or style, and in the baroque period there are distinguished examples, and in the rococo much that is charming and exquisite. Every age is prone to regard its own taste as the last word in beauty. A reading of the past suggests that man has had many moods and many points of view, and that no single standard of beauty has been discovered any more than one final philosophy.

6. ENGLAND

The religious issue was powerful in England during the Renaissance, but it never caused the extravagance of feeling or the slaughter that desolated France. Political considerations controlled, and, though the rising tide of Protestantism was strong, the success of Anglican Protestantism involved a religious compromise.



The political struggle between Parliament and ruler was fully as important as the religious contest with which it was always entwined. The height of the Renaissance, the era of Queen Elizabeth and of Shakespeare, saw the eclipse of par-

liamentary and popular rights and the rise of absolutism as in France. But, unlike France, by 1700 the old rights of Magna Carta were restored and new rights added; and Parliament was established on a sure footing, independent of royal contest. Thereby England led the world in the development of representative government, and set an example which all Europe and America were ultimately to follow.

Arriving late on the world scene, England set out to conquer the seas. She laid the foundations of a world-empire. She achieved the leadership of Europe by adopting the policy of preserving a balance of power.

Her literary flowering was late, sudden, and glorious. Shakespeare was born the year Michael Angelo died (1564), and his first play appeared as Montaigne died. A rich contemporary art surrounded, but no long line of literary forebears preceded, him.

Politically it was a period of tempest and sudden shifts of wind. Progress toward toleration and a limited monarchy was won not by logic or steady advance but by compromise, after experiencing extremes of Catholicism and Protestantism, through a practical sense for public affairs that triumphed over the selfishness of princes and the passions of fanatics. The list of religious turns and overturns, most of them due to the chance of a prince's or princess's religious upbringing, runs thus:

Henry VIII, the worst of the Tudor despots, severed the Anglican Church from Rome largely to secure a divorce

(1534). His three children, by three different wives, succeeded him in turn.

Edward VI established Protestantism as the state church.

Mary restored Roman Catholicism.

Elizabeth restored Protestantism.

Charles I, the most despotic of the Stuarts, aroused fears that Roman Catholicism would be restored. He was put to death, and a commonwealth under the Puritanical dictatorship of Oliver Cromwell ruled (1649–1658).

The restoration of the Catholic Stuarts renewed fears of Roman Catholicism and resulted in the Revolution of 1688, which placed William and Mary, from Protestant Holland, on the throne. The independence of Parliament was established.

Similar fears placed the elector of Hanover, George I, on the throne.

Thus, while Protestantism first prevailed in England to aid a king's selfish designs, it gained strength so rapidly that it helped set in motion two revolutions and colored the whole course of British government.

The period began with the Wars of the Roses (1453–1485), a feud between the houses of York and Lancaster with no understandable cause and no result save protracted bloodshed, and the succession of the Tudors to the throne. This period succeeded immediately to the Hundred Years' War, and was stained with incredible blackness even for this barbaric age. The monarchs of the period practised every

THE CROWN OF ENGLAND BEING OFFERED TO RICHARD, DUKE OF GLOUCESTER, AT BAYNARD'S CASTLE IN 1483.

From a wall-painting in the Royal Exchange, London, by Sigismund Goetze.

species of crime, including fratricide and plain murder—the last of the Yorkists was the sinister Richard III, duke of Gloucester, who had the two young princes smothered in the Tower. He was killed at Bosworth Field (1485) by the Lancastrians, and Henry VII, the first of the Tudors, succeeded to the throne. It was with Henry VIII (reign: 1509–1547) that the Reformation reached England. This handsome, brilliant, and selfish monarch was no Protestant as a matter of conviction—he wrote a pamphlet against Luther for which the Pope gave him the title Defender of the Faith. Nor was the country greatly moved by the new religious views. There was, however, as in Wycliffe's day, a wide-spread hostility to the abuses of the Church and to the papal authority, similar to the feeling in Germany. Thus when Henry VIII desired a divorce so that he could marry Anne Boleyn and perhaps secure a male heir to his throne, he could break with Rome and meet little popular opposition. He had himself named supreme head of the Church and dissolved the monasteries, thereby gaining enormous revenues. But he remained orthodox in doctrine and permitted little progress in the direction of Lutheranism. Thus the Protestant Revolt arrived in England through the personal needs of a despotic king. It remained and thrived because of a wide-spread antagonism to papal authority, largely based on political grounds. The faith of Luther and Calvin did not reach England in force till later. Henry was a friend of the new learning, and two great leaders of the English Renais-

sance, Sir Thomas More and Dean Colet, lived in his reign. The sinister figure of the king accomplished no darker deed than the execution of More for treason. The ruthlessness of

ANNE BOLEYN.
From an anonymous portrait in the National Portrait Gallery, London.

Henry VIII toward his six wives was paralleled by the high hand with which he ruled the nation. His ambition and practical sense played a considerable part in the upbuilding of England for its triumphant years soon to follow.

The effort of Queen Mary to restore Catholicism proved futile. She was a kindly soul, little deserving the title of Bloody Mary which Protestants gave her. The executions for heresy in her reign numbered about 300, a horrible barbarism by modern standards, yet a mild policy by comparison with

THE DEFEAT OF THE SPANISH ARMADA.

The Spaniards are drawn up for battle at the right, while the English ships approach them from the left.

From a tapestry formerly in the House of Lords.

the terrors of the French religious massacres. The nation was too well pleased with its religious independence to return to Rome. The martyrs of Mary's reign served only to strengthen Protestantism. Amid general rejoicing Queen Elizabeth (reign: 1558–1603) brought back Protestantism, and with it the spirit of "England for the English." She was educated in the learning of the Italian Renaissance, and though she boasted of being (as she was by blood) "mere English," her mind possessed much of the astuteness and subtlety of an Italian. She was an able and patriotic ruler, and her reign

covered one of the most glorious periods of English history, including the climax of the long contest with Spain, the destruction of the Invincible Armada in 1588, and the rise of Shakespeare. Sir Francis Drake was the boldest voyager of her reign, ably supported by such gallant captains as Frobisher, Hawkins, and the versatile Raleigh. Drake pushed around the world (1577–1580) along the route of Magellan, sacking Spanish treasure-ships on the way. The piratical preying on Spanish galleons in the Spanish Main was the great adventure of English seamen for years. It inevitably brought on war in which Protestant Netherlands united with Protestant England against Catholic Spain, and by this time English seamen were so skilful that the great Armada sailed through the Channel to disaster. Sir Walter Raleigh began as a sea-captain, became a queen's favorite, and organized the first English effort to colonize America. It failed at various points along the North Carolina coast, yet the State of Virginia, named after Elizabeth, the Virgin Queen, preserves the memory of Raleigh's expeditions. Poet, historian, explorer, gaining his favor at court by his wit and good looks, and losing his head after a desperate adventure in piracy, Raleigh was a typical figure of the English Renaissance.

Scotland had long been hostile to England, supported in her antagonism by French aid. But under the leadership of John Knox, as stern a Protestant as Calvin himself, the country had become Presbyterian. Elizabeth strengthened the *rapprochement* of the two countries, which was to ripen into

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QUEEN ELIZABETH COMMISSIONS SIR WALTER RALEIGH TO SAIL FOR AMERICA.

From a painting by A. K. Lawrence, by courtesy of Thomas Nelson & Sons.

union under her Stuart successor, James I. Ireland had remained Catholic, and the reign of Queen Elizabeth was marked by ruthless efforts to force the Irish to turn Protestant, the first of a long series of futile efforts to assimilate Ireland by compulsion. Why Scotland turned Protestant and became a loyal part of the kingdom, and Ireland remained Catholic and unreconciled, is one of those mysteries of race and climate and what not else in which history abounds.

The story of Scotland in these years is bound up with the fate of Mary Queen of Scots (1542–1587), one of the most charming, brave, passionate, and corrupt of women. She was brought up a Catholic in the French court, and married when fifteen to Francis II, a son of Catherine de Medici, who soon died. Thereafter she sailed to Scotland. When she found the faith of Calvin in command, she assented to its sway. Neither her religion nor her country prevailed against her ambition and her passions. She had three husbands and several lovers, the most important fact of these relationships being the birth of a son, James VI of Scotland, who was to become James I of England, thereby uniting the two kingdoms and establishing the Stuart dynasty on the throne of England. Driven out of her own kingdom by the wrath of her subjects at her immorality, she was imprisoned in England. Queen Elizabeth showed a generous desire to save her, but the fears of Protestant England prevailed, and Queen Mary was beheaded for complicity in a plot to overthrow Elizabeth.

The Stuarts brought to the British throne a leaning toward the Catholic faith and the divine right of kings, the same sort of despotic political theory which Louis XIV advocated in France. The Tudors had ruled England with a high hand, but they had done it in typical British fashion under a cloak of parliamentary forms. James I (reign: 1603–1624) took the position that he was responsible to God alone, and could make any law he pleased without consulting Parliament. Under his son, Charles I (reign: 1625–1649), the contest between king and Parliament came to a head. Likewise the religious contest reached its climax.

By this time Protestantism had gained great strength in England, and had developed that tendency toward sectarianism which has been its continuing characteristic. The Church of England* had been the established church since the time of Henry VIII (except for the reign of Mary). But its members were already split into two hostile groups: the High Church party, which, while rejecting the Pope, held to most of the Catholic practices and faith, and the Low Church party, which opposed all "superstitious usages" and demanded an extreme simplicity of ritual. The members of this latter party were called Puritans; later the name was used loosely to include all the English Protestants who advocated a strict observance of Sunday. Among these latter were Presbyterians and Separatists, or Independents. Presbyterians held

*The name Protestant has never been used in the title of the Church of England. It is, however, found in the Protestant Episcopal Church of the United States, an independent branch of the Church of England.

to the faith of Calvin and the church government which he devised, through presbyters or elders. The Separatists believed that each congregation should rule itself, and Congregationalism developed from this conception of church government. Separatists, driven to Holland by persecution, sent forth the small band in the *Mayflower* which landed at Plymouth Rock in 1620,* and it was Separatists who chiefly settled New England. So far as faith went, there was no great diversity among Low Churchmen of the Church of England, Presbyterians, and Separatists. All were orthodox Protestants of a Calvinistic type, and all felt no tolerance either toward Roman Catholics or toward two new and heretical Protestant sects then forming. These were the Baptists and the Quakers. The former developed many subdivisions, but all rejected the orthodox doctrine of infant baptism, and held that the rite should be administered only to those old enough to profess their faith. The Quakers revolted against the formalism of the orthodox religions, and made an inward spiritual experience their central belief. They had no creed, no ritual or sacrament, and no priesthood, and practised passive resistance, opposing all violence and war.

In this confusion of many faiths, Charles I stood with the High Church of the Church of England, and under his lead-

*These first settlers of New England are called the Pilgrim Fathers in American history. They and those who followed to New England were alike Puritans in the broader sense of the term and included various shades of Protestantism. But Congregationalism was the prevailing faith, and the theocratic governments set up forbade any other religion.

ership, practices were restored in the service which the Puritans regarded as "popish." He thus alienated the Low Churchmen of the established church as well as Presbyterians and Separatists. To this religious dissatisfaction was added a grave dispute with Parliament. By arbitrary arrests he drove that body to draw up the Petition of Right, another landmark in the growth of British liberty, asserting such fundamentals as that no tax should be levied without the consent of Parliament, and no freeman punished except according to law. His effort to get ship money for a war by a device of doubtful legality was boldly opposed by John Hampden, a country squire. For eleven years Charles ruled without a Parliament in the face of increasing hostility. Then an ill-advised effort to coerce Scotland to the Anglican service brought matters to a crisis. The National Covenant of 1638 pledged its signers to uphold Presbyterianism, and therefrom the Covenanters took their name, standing fast in the face of persecution and martyrdom. Charles was obliged to summon Parliament to procure money for his war in Scotland. There resulted the Long Parliament (1640–1653), which refused to aid Charles, defied his efforts to arrest its leaders, and started the Great Rebellion. Most of the aristocracy, the Catholics, and some Anglicans supported the king. They were called Cavaliers, and the parliamentary forces were known as Roundheads, because of the close-cropped heads of some of their members in contrast with the long hair of the Royalists.

The Rebellion would hardly have succeeded but for the military skill and iron will of Oliver Cromwell (1599–1658), who organized an army of devout Puritans and

OLIVER CROMWELL.
From an engraving after the painting by Sir Peter Lely.

fought the war in the spirit of a crusade. The Royalists were defeated at Marston Moor and Naseby, and the king became a fugitive. Even then there were efforts to negotiate a reconciliation with the king; but the situation was confused and

perilous, for the rebels and the extremists of Parliament, with Cromwell leading, made up their minds to take his life. A Colonel Pride, representing the army, excluded the king's supporters from the House of Commons, and the Rump Par-

CROMWELL DISSOLVES THE LONG PARLIAMENT.

liament that remained after "Pride's Purge" set up a special court of the king's enemies, which found him guilty of treason and sentenced him to death. Charles was beheaded in 1649, the first monarch of Europe to be executed by his subjects.

His condemnation was unjust and extralegal, a purely military execution. It was the act of a small minority of fanatics and did violence to the wishes of the great majority of Eng-

CHARLES I LEAVING WESTMINSTER HALL AFTER HIS TRIAL.

From a drawing by C. A. Shepperson.

lishmen. There resulted a swift revulsion of feeling. The weaknesses and trickery of Charles were forgotten and the country turned more strongly than ever toward the monarchy. Charles became for many a martyr and a saint. There can be no question of his personal virtue, his goodness in conduct and intentions, or of his sincere religious faith. He met an unjust death with dignity and fortitude. But in the years before he had displayed a feebleness and an obstinacy, a trust in evil counsellors, prevarication and deceit, which prevent his ranking as a great or even a competent king. Charles I was lifted by martyrdom to a regard far above his deserts.

There followed the strange years of the Commonwealth and the Protectorate, maintained by a small minority against the general will of England. The Rump Parliament proclaimed England a commonwealth, which was to say a republic. Cromwell labored with it to establish a constitutional government, but finally dissolved it because of its obstinacy. He chose a new Parliament, the famous Barebone's Parliament, named after a Puritan member, Praisegod Barebone, and that proved quite as muddled and useless as its predecessor. Thereupon he became Lord Protector, and was for five years the virtual king of England, by right of his sword, the efficient, Puritan army. Cromwell was himself, by the standards of his age, tolerant, but he supported his partisans, the Puritan zealots, in turning against the Anglicans and Roman Catholics the same repression which they had suffered. They passed strict laws for Sunday observance, and the country had

an experience with religious fanaticism which it never forgot. The black spots in Cromwell's career were his execution of the king without just cause, and his conquest of Ireland, where he slaughtered priests and put down Catholicism with extreme brutality. He was a masterly general, and by his vigorous foreign policy helped lay the foundations of British empire overseas. His brief years of rule gained him the respect and fear of all Europe. He died in 1658, and soon afterward the English Commonwealth passed, never to return. He had effected no organization which could endure. In 1660 the restoration of the Stuarts brought Charles II to the throne amid general rejoicing.

There would doubtless have been a natural reaction from the restraints of Puritanism; led by the example of flagrant debauchery set by this new Stuart, the period achieved a corruption without a parallel in England. As a king he was clever, but lazy, treacherous, and selfish. Of strong Catholic leanings, he made a number of efforts to secure toleration that would include that faith. But Parliament stood stoutly by the Church of England, and by various strict laws of conformity united all the nonconforming Protestants—Presbyterians, Independents, Quakers, and Baptists—in a group called Dissenters.

The last of the Stuart kings, James II (reign: 1685–1688), received short shrift at the hands of his people. He was a Catholic, and showed a clear desire to restore Catholicism in England. By his first wife, a Protestant, he had

a daughter, Mary, who married William III, prince of Orange. For his second wife he married a Catholic, and she bore him a son, the heir to the throne. The Protestant leaders thereupon boldly invited William of Orange to rule over England. William accepted and marched upon London. James II tried to oppose him but his army deserted, and the bloodless Revolution of 1688 was accomplished. James II fled to France, where Louis XIV received him.* Parliament named William and Mary joint sovereigns, at the same time enacting the famous Bill of Rights summing up the rights of the British citizen and the limitations on the rights of the monarchy. The next year the Act of Toleration granted freedom of worship to all the Protestant Dissenters, Presbyterians, Congregationalists, Baptists, and Quakers. Catholics were excluded from the Act, but their services were not disturbed. The contrast with the conditions in France at the same moment is striking. In 1685 Louis XIV had ended tolerance by the revocation of the Edict of Nantes, driving Protestants out of the country by the thousand. At the same time he was asserting the powers of an absolute monarch un-

*The fate of the Stuarts ran a long sequel. The Old Pretender, the son of James II, was proclaimed king as James III by Louis XIV, and lived at Rome, where the Pope acknowledged his title. Two futile efforts to gain him the throne were made, one in 1745 led by the handsome Young Pretender, "Bonnie Prince Charlie" of the songs. Jacobite sentiment was strong in Scotland, and it was there that Charles landed and led his armies to defeat at Culloden. His romantic escape helped his fame to live, but all serious hope of restoration was over. That the Order of the White Rose (the Stuart emblem) still exists bears witness to the extraordinary loyalty of which human nature is capable toward a romantic and hopeless cause. Such devotion needs to be remembered in a period when some historians are stressing economic causes as the sole spring of human action.

curbed by constitution or Parliament. In England, Parliament in setting up a new dynasty had definitely assumed the supreme power in the state.

The flowering of English literature was as sudden and glorious as was the Renaissance burst of painting and sculp-

WILLIAM AND MARY.
From engravings after paintings by Jan Wyck and Brandon.

ture in Italy. The Anglo-Saxon literature has chiefly a linguistic and historical interest. Chaucer in the fourteenth century was a great and almost solitary figure, sharply contrasting with earlier writers, and recording in style and language the influences of Mediterranean civilization upon England potent from the days of the Norman Conquest forward. Much confusion has resulted from dwelling upon either Anglo-Saxon or Latin influences to the exclusion of the other. As the Elizabethan masters make clear, both

streams flowed into the English mind, uniting in a new language and a new spirit. English was not English and England was not England till this fusion took place. Precisely as

From a photograph © Hollyer, London.

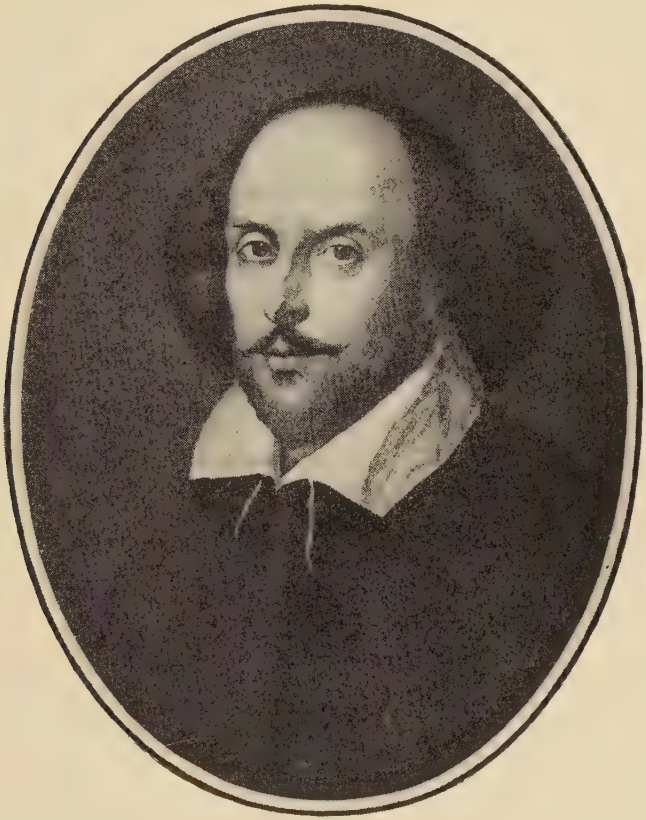
GEOFFREY CHAUCER.

in France, North and South were united, and in both cases the result was a new language and a new people, dominated by neither element. A rich line of English and Scotch ballads, primitive and poignant, flowered in the fifteenth cen-

tury. So did the great Arthurian legend, which, originating probably in Wales, received a noble English setting in "Le Morte d'Arthur" by Sir Thomas Malory.

Owing to the lateness of the Renaissance in England, there were attendant upon its birth not only the great figures of the ancient world but the Renaissance masters of Italy and France, such men as Bruno and Machiavelli, Rabelais and Montaigne. Yet there was little imitation. A vigorous originality spoke from the start. Even the earlier writers of sonnets, Wyatt, Surrey, and Sydney, who drew from the Petrarchan model, discovered a new and wholly English poignancy that reached its perfect flowering in the sonnets of Shakespeare, perhaps the richest and most beautiful web of English words ever woven. This lyric impulse toward brief perfection was one of the strongest of the English Renaissance, and the songs of the Elizabethan period and the years that followed, in a wide variety of patterns, have never been surpassed. Such men as Drayton, Marlowe, Donne, Ben Jonson, and Herrick belong with the rarest creators of beauty. It is typical of Shakespeare's extraordinary genius that here, too, he ranked his age; the lyrics of his plays exhibit at their finest the lilting grace and restrained emotion which are the distinguishing marks of the Elizabethan songs. So powerful was the talent that it carried forward to the last of the Renaissance masters, the Puritan Milton, whose moral earnestness could use a technic as sensitive and exquisite as any Elizabethan's.

The other great achievement of the age was the Shakespearian drama, and, while there were lesser figures, it would be idle to pretend that they rank within measurable distance



WILLIAM SHAKESPEARE.
From a mezzotint by Cousins after the Chandos portrait.

of William Shakespeare (1564–1616). The one man whose line possessed equal passion and beauty was Marlowe, and he died too young to permit the full development of such dramatic talent as he possessed. In the field of sonnet and song, Shakespeare was one among many. In drama he had no rivals,

nor comparable predecessors, nor any school that could carry on the tradition of his art. The romantic beauty of the Shakespearian verse is so rich and engrossing that one is in danger of forgetting that the significant greatness of his art was its dramatic quality, ranking him as a supreme genius of the theatre. It was the most stirring and adventurous age in England's history. The vigorous mental curiosity of the period went hand in hand with action overseas and around the world. It was Shakespeare's achievement to express the whole sweep of his nation's greatness in this climactic hour. He used and doubtless felt the loyalties and prejudices of Englishmen of his time. He was too greatly absorbed in the deep and enduring conflicts of the human spirit to be concerned in surface changes. The point of view of Montaigne expresses something of his apparent philosophy, warmed by a humor and a passion that the French essayist never knew. Shakespeare was a perfect expression of the Renaissance in the fact that his chief interest was human nature, and it is a tragic paradox of literary history that less is known of Shakespeare, himself, than of almost any world figure. His lifetime of work ranged from the freshness and joy of the early Renaissance to the tragic doubts of its later growth; it is with this latter outlook that his genius essentially belongs.

One strong element in English character found no expression in Shakespeare. That was the spiritual and mystical outlook recorded in the rich tapestry of Spenser's "Faerie Queene," the religious lyrics of Donne, and the magnificent

THE STAGE OF "THE SWAN," ONE OF THE FIVE THEATRES WHERE THE SHAKESPEARIAN DRAMA ORIGINATED.

From the de Witt drawing, the only definite contemporary picture of an Elizabethan theatre known.

organ tones of John Milton (1608–1674). The former, a contemporary of Shakespeare, for sheer verbal artistry belongs in the first rank, a poet's poet but confusing for the uninitiated. The amazing genius of Milton began in an exquisite lyrical outburst, turned to prose polemics through the years of the Great Rebellion, and ended in the great religious epics, "Paradise Lost" and "Paradise Regained," in verbal felicity as in sweep of imagination to be compared only with Dante. An ardent admirer of Cromwell, a historic champion of tolerance and a free press, Milton stands a great English hero on the side of liberty.

After lyrics and drama, a third great English literary tradition was founded in philosophy. Its forerunners were Dean Colet and Sir Thomas More, pioneers in the Revival of Learning, friends and contemporaries of the great Erasmus. More's "Utopia," a picture of an ideal state, stirred men's minds toward tolerance, and added a word to the English vocabulary to signify an impractical ideal. The great philosophic figure of the Elizabethan Age was Sir Francis Bacon (1561–1626), a universal genius and a master of terse English prose, imaginative and profound. His "Novum Organum," or "New Logic" (1620), was an epoch-making work in both philosophy and science. His "New Atlantis" continued the speculation about an ideal state which Sir Thomas More started. The Authorized Version of the Bible (1611) was completed in the reign of James I. It was based on many predecessors, on the work of Tyndale and Wycliffe,

among others. The result was a masterpiece of English prose. Heir to this great and varied tradition was Sir Thomas Browne, a contemporary of Milton, the builder of majestic periods.

At the end of the period and facing the future stood another great philosophic pioneer, John Locke (1632–1704). Like his countrymen, he was weak in speculative imagination, in the metaphysical approach to the problems of the universe, strong in common sense, in his reverence for facts. He fought valiantly for tolerance in religion and asserted the right of the people, as the only true sovereigns, to govern themselves as they thought best. He was thus the forerunner of Rousseau, and the whole democratic theory was based on his philosophy.

Almost this whole firmament of literary stars rose and set between 1580 and 1680. Only once before, in ancient Greece, was there a century of equal vigor in the art of writing. Milton was the last of the giants. The versatile genius of Dryden, mighty in satire, mediocre in drama, looked toward the next century. John Bunyan was a unique voice of the people, whose "Pilgrim's Progress" helped close the century. Decline had already set in, as the licentious comedies of the Restoration gave evidence. The Renaissance approached its final stage in England in the classic formalism of the eighteenth century, the Augustan Age, of great intelligence and formal beauty. The great thrust of the Renaissance had already passed.

MILTON, DURING HIS BLINDNESS, DICTATING "PARADISE LOST" TO HIS DAUGHTERS.

From a painting by Michael Munkacsy.

7. SCANDINAVIA

The rise of nationalism in Europe furnished its extreme example in the division of the Scandinavian peoples, all closely akin, into the three independent nations of Norway, Denmark, and Sweden. The three, after a separate history through the Middle Ages, were united in 1397 by the Union of Kalmar. Sweden split off in 1523 and remained a separate kingdom thenceforward. Norway came under Danish control but never accepted her lot. She united with Sweden in 1814 and regained her independence in 1907.

Of the three, Sweden reached her height of power in Europe under the brilliant rules of Gustavus Adolphus (reign: 1611–1632) and Charles XII (reign: 1697–1718). Her territory at its greatest was double that of to-day, and these ambitious rulers gained for her the dubious glory of a great military power. The will of a strong king, Gustavus Vasa, had made the nation Protestant in 1523, and the great campaigns of Gustavus Adolphus on behalf of Protestantism in the Thirty Years' War have already been referred to. The spectacular campaigns of Charles XII, overrunning Poland and marching foot-soldiers and cavalry across a frozen sound into Denmark, were brilliant but unproductive.

No such extravagant ambitions of conquest disturbed the progress of Denmark. Under her greatest king, Frederick II (1534–1588), her ships ruled the Baltic, and foreign ships were forced to strike their topsails to Danish men-of-war in

token of their supremacy. These were the years of Tycho Brahe's great researches. The decline of Denmark from her position as one of the great powers of Europe was due in part to her peculiar form of government, an elective monarchy resting on an oligarchy of nobles, that lacked the strength either of a dynastic ruler or a strong peasantry.

8. THE SLOW BEGINNINGS OF SCIENCE

The seeds of the next era were slowly swelling underground throughout this period. At widely distant points, in many countries, isolated pioneers were founding science anew. In the sense that the ancient Greeks had made swift progress in the field of the intellect, and were on the brink of greater advances when Roman practicality and barbarian indifference intervened, and that the intellect now retook this ancient path, the rise of modern science can be regarded as part of the Revival of Learning. But as the word Humanism suggests, the chief interest of the thinkers of the Renaissance, as of the Greeks, was man, and what now took place was the growth of a new interest in the physical world and the pursuit of truth regarding it by those slow and patient methods of experimentation which the Greeks had but begun and which constitute the base of modern science. The Renaissance was essentially an era of exuberant vitality, of adventure, color, and song, which even the reaction of the Reformation toward conscience and faith could not cancel. The scattered scientists worked apart from these excitements,

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ERASMUS, COLET, AND MORE.

From an etching by Bicknell, after the painting by Howard Pyle.

and their advance was as tediously slow as the outburst of the Renaissance was swift. Their accomplishments were the

SCENES FROM "PILGRIM'S PROGRESS."

Left. Christian meets Evangelist at the foot of Mt. Sinai.
Right. Christian enters the Celestial City.

From the woodcuts made for the first illustrated edition.

germs of the years to come rather than the flowering of their own age.

The alchemists with their alembics seeking to transmute lead into gold or to summon a sylph or a salamander from the elements were the forerunners of the scientists, a half-way stage between mediæval magic and modern chemistry.

Similarly, astrology preceded astronomy, studying the planets for their supposed influence upon human lives. Not until nature was studied for its own sake and man ignored was the true spirit of modern science achieved; incidentally, by thus forgetting himself man through the discoveries of science ultimately accomplished more wonders for himself than alchemists or astrologers dreamed of.

The great scientific names of the Renaissance are few by comparison with the list of poets and painters. But typifying the new method of science that ignored national boundaries and produced a single body of truth from many sources, the six leaders named below represented six different countries, Poland, Denmark, Italy, Germany, France, England.

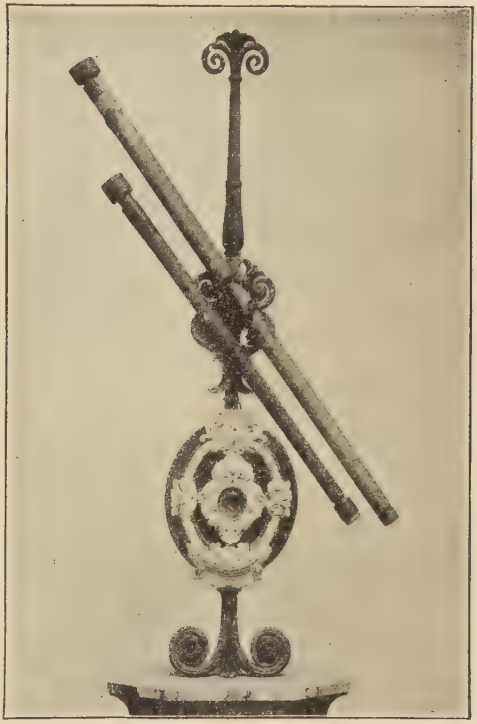
Copernicus (1473–1543), the Pole, took the first great imaginative leap of conceiving the earth and the planets as revolving around the sun. A single Greek, Aristarchus of Samos (about 250 B. C.), had made the same guess; but the prevailing Greek view was that expressed in the Ptolemaic system that the earth was the centre of the solar system. This was the accepted theory among learned men in the Middle Ages and the Renaissance. It fitted well with the Christian view of man as the final step in creation and the centre of the universe. Not only the appearance of the sun's motion but this traditional wisdom of the Church and all learned men was rejected by Copernicus. The new idea made progress slowly, opposed by the full weight of the Church's authority. It constituted one of the great revolutionary movements

TYCHO BRAHE'S GREAT MURAL QUADRANT.

The Astronomer at the extreme right is observing a star through the sights. Above the arc of the quadrant is a painting of Tycho and some of the instruments of his observatory.

in the mind of man, and it would be difficult to overestimate the disturbing effect upon man's faith and philosophy.

Tycho Brahe (1546–1601), a Dane, announced no such startling reconstruction of the universe, but he collected an immense amount of astronomical observations, the first systematic records of the kind made since Alexandria. He had the true modern spirit of patient research, and his records were turned to good account by his assistant, Kepler. From this time forward, scientists were in correspondence with one another all over Europe, their books were printed and circulated, and the spirit of co-operation that has speeded up research and made modern science possible became universal.



TWO OF GALILEO'S EARLY TELESCOPES, NOW IN THE TRIBUNA DI GALILEO AT FLORENCE.

The invention of the telescope was the work of Galileo (1564–1642), the great Italian scientist. Lenses had already been used for spectacles in Holland. Galileo applied the principle to a telescope so powerful that he could see the moun-

tains on the moon, the rotation of the sun, and the satellites of Jupiter. With these new-found facts he strongly supported the Copernican system. A powerful and comprehensive genius was Galileo, inventing apparatus of precision in many fields, dropping objects from the Leaning Tower of Pisa to establish the laws of falling bodies, laying the foundations of dynamics and mechanics, writing brilliantly in Italian. He was acclaimed by all learned men, and lived most of his life unhampered by the Church. But a plea for the Copernican theory written in Italian which every one could read brought down the Inquisition upon his head, and he was forced to recant in 1633. He was not, however, tortured or punished, and his scientific researches were not interfered with. Only a generation before, Giordano Bruno, a mystic philosopher rather than a scientist, but an eager follower of Copernicus, had been burned at the stake for similar convictions. But he was a monk and a fiery critic. Rome was still a long distance from toleration of such rebellion. Blindness came upon Galileo in the last five years of his life, and it was Galileo blind whom Milton visited in Italy, himself destined to meet the same cruel fate.

The German astronomer Kepler (1571–1630) advanced the Copernican system to a new accuracy, discovering the fact that the orbits of the planets were not circles, as Copernicus believed, but ellipses, and formulating three laws of the solar system that still bear his name.

All this gradual astronomical progress led to the culmi-

nating achievement of Sir Isaac Newton (1646–1727), whose long life bridged the transition from the slow beginnings of science to the full sweep of its modern progress. It was in 1686 that his famous "Principia" was published, in which he formulated the law by which every particle of matter attracts every other particle "with a force varying inversely as the square of their mutual distances, and directly as the mass of the attracting particle." A number of his predecessors had conceived such a force. He was aided by half a dozen contemporaries, who contributed to his study. His labor of genius was the discovery and establishment by mathematical proof of the one simple physical law by which the whole universe, the earth revolving about the sun, the moon revolving about the earth, a pebble falling to a beach, is governed. The magnitude of his discovery was not at first appreciated, but his work gained an extraordinary vogue in the eighteenth century, and his discovery has been generally regarded as the greatest single feat in the history of science.

By this time the full tide of scientific progress, borne along by the co-operation of many investigators in every nation, was at hand. The Royal Society was founded at London, as a means of co-operation among scientists, and the "Principia" was one of its early publications.

Two thinkers remain to be mentioned whose contribution to science was theoretical rather than practical. Sir Francis Bacon was a contemporary of Galileo and keenly interested in the progress of science. But he was concerned in the meth-

ods of scientific research rather than in the labor of research itself. He never applied the methods of experimentation and induction—that is to say, the ascertainment of a great mass

SIR FRANCIS BACON.
From an engraving by W. Marshall.

of particular facts and the drawing therefrom of a general law—which he was the first to advocate. Nor, as a matter of fact, have the main advances of science been achieved by this method; commonly progress has come through an imaginatively conceived hypothesis checked and corrected by ex-

perimentation, involving deduction from general principles rather than induction. To call Bacon the father of modern science, as has been done, seems a gross exaggeration. The most that can be said is that his works stimulated the zest for facts, and helped establish the new spirit of scientific research which rejected Aristotle's dicta for a fresh study of natural phenomena.

Descartes (1596–1650) worked a generation later, a Frenchman by birth, a Hollander by residence for the greater part of his life. He was a true scientist in the field of mathematics, and his discovery of analytical geometry aided Newton a half-century later. But it was as a philosopher that Descartes gave his most distinguished aid to science and earned a rank as one of the greatest minds that France has produced. He started with the famous sentence, "Cogito, ergo sum" ("I think, therefore I am"), and built up a theory of the universe consistent with the new spirit of science which treated all physical phenomena as if they were governed by laws. It might be said that he viewed the universe as a machine created by God. His most famous book, "Discours de la Méthode," was inspired by a dream which he had in his twenty-fourth year when a soldier in the Thirty Years' War. He saw the whole future of knowledge spread out before him, and he spent the rest of his life in seeking to work out this picture by thought. In a true sense he was the founder not of modern science but of the modern approach to the universe.

CHAPTER XX

THE AGE OF SCIENCE AND DEMOCRACY

No precise line can be drawn separating the period of the Renaissance and its classical decline from the new age in which man now lives. The forces of the two eras existed side by side for a century and more. As has been said, such a division has no real existence, but is simply a convenient means of assembling and stressing the dominating characteristics of a period. Nothing could be clearer, however, than that the eighteenth century witnessed another great and creative outburst, suggestive of the twelfth and fifteenth centuries. The parallel can be carried forward with some accuracy and the nineteenth century compared to the thirteenth and sixteenth centuries, in that it applied and developed the ideas and movements originated in the preceding century. If the same analogy were to be pushed yet farther, the twentieth century might be regarded as a century of decline, of weakening forces, and confusion. But centuries are not subject to such neat classification, and historical analogies are as dangerous as they are tempting.

Science and democracy have been the two basic forces of the eighteenth and nineteenth centuries. It can be argued that of the two, science was the more fundamental. Perhaps, when a fuller perspective is possible, the present era will be

regarded as the Age of Science. But the events are too close for such philosophizing. As a matter of fact, the word science is itself misleading, for the stress at the start is rather upon invention than pure theory, and invention has not borne a close relationship to pure science until recently. The inventors have usually been a different type of man from the scientists. Furthermore, democracy must stand for an idea, an inspiring goal, rather than a fact; the visible signs of its expression were the great revolutions, political and social. To be more objective and concrete, these centuries might well be labelled The Age of Invention and Revolution, or The Age of the Machine and the People.

The eighteenth century was one of the most interesting periods in the world's history. It began in a delightful atmosphere of formal classicism and aristocratic charm, a civilization that was dying gracefully. Its men and women, its benevolent despots and its Voltaire, its Fanny Burney and its Dean Swift, live in its books as from no other age. It ended in France in an outburst of bloodshed and romanticism, of emotion breaking every conventional rule of government and art and echoing throughout Europe. Meantime, from the start science and invention marched quietly forward to effect a remaking of society and its manner of life. England led in this industrial revolution, which began before the French political Revolution, and continued long after it, and which, for all its inconspicuousness, rivalled that great overturn in importance. It laid down the physical conditions under which

the nineteenth century developed. In so far as a date is of aid in defining a period, the Congress of Vienna in 1815 is often taken as the terminus of the first act of the modern drama. This earlier century saw the rise of two new powers, Russia and Prussia, and the destruction of one, Poland, by partition.

Thereafter the nineteenth century in general applied what had gone before. The speed was so great and the accomplishments so vast that the century has been called the "wonderful century." Certainly the progress in science, pure and applied, ranks as one of the greatest feats of the human intellect. Material is the word often applied to this civilization, yet the human mind has never achieved equal progress. The material achievements, in machines multiplying comfort, convenience, and communication, outran man's ability to organize the society which they have produced. In this sense the material gains may be said to have overborne the intellectual and spiritual. Yet from the French Revolution onward, the fate of the common man became increasingly the centre of interest. First his civil rights, then his political rights, and, finally, his general welfare—his education, his wages, his health—have become subjects of governmental concern. Democracy is a convenient name for this general tendency, which has gone far beyond the old conceptions of political democracy and touched industry and society. Humanitarianism is, perhaps, more suggestive of this point of view that regards mankind as the chief concern of man. The world became smaller and smaller as means of communication in-

creased, and the rise of world commerce developed world politics, in which the quarrels over colonies and markets became more tense than ever. With the arrival of America, Japan, and China upon the world scene, the final stage of world history, the Pacific, succeeded to the Atlantic, which had in turn succeeded to the Mediterranean.

I. THE RISE OF MODERN SCIENCE

Pure science inspired the intellectual growth of this age. Applied science erected its physical background. Both ideas and economic facts were potent forces, and, despite the contemporary tendency to stress the supremacy of economic forces, no means of weighing the two elements are known. The political and the artistic history of these centuries can best be portrayed against this significant background of minds and machines.

Invention can be regarded as no more than applied science, yet it made its early advances independently of science. Printing from movable type, one of the most important of all inventions, was developed without the aid of science in the modern sense. The mind of the early inventor was mechanical and imaginative, concerned not in general truths but in devices producing specific results. Since then invention has become increasingly related to science, as the acceleration in the process of invention records. The inventions or discoveries during all the centuries prior to 1700 are far less numerous than those of the eighteenth and nineteenth centu-

ries; and the last decades show a swiftly increasing list of wonders.

The two fundamental sciences, physics and chemistry,

NEWTON.
From the painting by Sir Godfrey Kneller.

LAVOISIER.
From an anonymous drawing.

were almost entirely new creations of the eighteenth and nineteenth centuries.

The founder of modern chemistry was a Frenchman, Lavoisier (1743–1794), who, using the researches of many others and insisting upon the precise weighing of masses, determined the principle that while matter can be changed in its chemical composition, by fire, for instance, it can neither be created nor destroyed. The next great step was taken by John Dalton (1766–1844), an Englishman, who conceived

the first scientific hypothesis of the atom as a subdivision of the molecule. The conception of matter as made up of small separate particles called atoms, rather than uniform and continuous, was the speculation of Dèmocritus, in the fifth century B. C., one of the greatest of the Greek philosophers. It was restated by Lucretius, and has become the prevailing view. But these early atomists were simply making magnificent guesses; they had no experimental basis for their view. By the eighteenth century enough facts were known to yield a helpful hypothesis of atom and molecule, the former being conceived as the smallest unit of matter, the latter as a collection of atoms and the smallest particle into which a substance, either an element such as lead, or a compound such as water, could be divided without losing its identity. Proceeding upon the basis of this hypothesis, chemistry applied itself to changes within the molecule, leaving to physics the processes which do not disturb the composition of the molecule. A long line of investigators in the nineteenth century worked out the atomic theory in great detail and discovered many elements. By the aid of the spectroscope, perfected in the early nineteenth century, the analysis of distant suns was made possible and the unity of the universe in the matter of its elementary substances was established. Finally, in the twentieth century, scientists discovered that the atom was not the hard, indestructible thing which Dalton supposed it to be, but itself underwent transformation as in the phenomena of radioactivity. The hypothesis of the atom, which had

served so long and usefully, was modified in this respect. The hypothesis of the molecule has been even more radically attacked. Because of the new knowledge of the atom, the ideas of molecules and the molecular reactions current among chemists even a few years ago are now undergoing searching revision. The older distinction between chemistry and physics no longer holds. The changes form an excellent example of the tentative character of every so-called law of science. The most serviceable hypothesis of the atom at the present time would view it and all matter as a phenomenon of electricity, perhaps, in still further analysis, as a kind of radiation like light. The atom is conceived of as composed largely of small units, called electrons, moving about a nucleus—the nature of which is in doubt—within the confines of their incredibly small system somewhat as the planets move about the sun in theirs. But this hypothesis is now under active examination, and suspended judgment is the only truly scientific attitude toward it as toward so many other scientific hypotheses.

This interpretation of matter in such terms is the work of physicists as much as of chemists. In fact it is impossible to say in which field of science radioactivity belongs. Physics was the old name for all science; various fields, like geology and chemistry, were fenced off; but as the development of the theories of radioactivity has made clear, these divisions of science are artificial, and science is really one. As physics developed in the eighteenth and nineteenth centuries, it be-

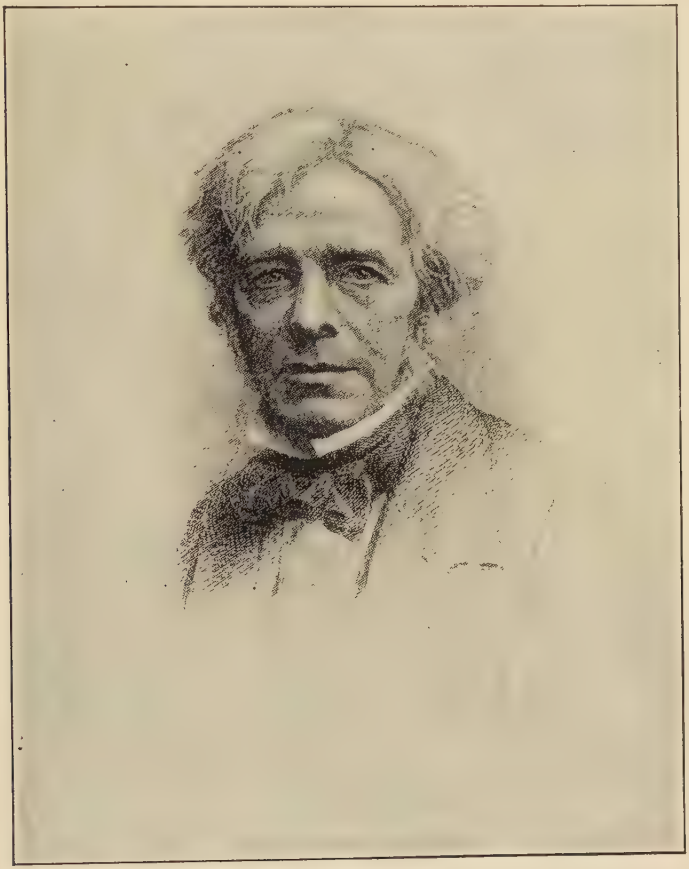
came confined to the study of matter in motion, and included specifically the subjects of mechanics or dynamics, heat, light, and electricity. Mechanics was one of the earliest fields of observation by reason of its practical value. The Greeks studied hydrostatics and the principles of the lever, for example. Not till Galileo was progress in the investigation of energy and motion resumed. Newton's discovery carried on the work. One of the greatest scientific discoveries of the nineteenth century was the determination of the law of the conservation of energy through the work of a Frenchman (Carnot), an Englishman (Joule), and a German (Helmholtz), culminating in the year 1847. This was as basic a law of nineteenth-century physics as the indestructibility of matter was of chemistry in the same period. Energy could be transformed—as by friction into heat, or by heating water in a boiler into the motion of a steam-engine—but energy could neither be lost nor created. It remained unseen until it changed its form, and whether seen or unseen it was indestructible. The theory of heat as a motion of molecules dated from the same period as this theory of energy. The law of the conservation of energy is now gravely doubted and new conceptions and new theories are preparing the new hypotheses or laws of the present advance.

These same fertile years of pioneering yielded the wave theory of light. Till then light had been regarded as composed of minute corpuscles emitted in straight lines by luminous bodies. An Englishman, Young, put forward in 1801

the theory that light consisted of vibrations of an all-pervading substance, distinct from matter, having neither atoms nor molecules, and imagined for the purpose of this hypothesis. This supposititious substance was called ether. No conclusive proof of its existence has been produced; but the conception fits many of the known facts of light, and by its use in investigation and deduction much ground has been gained. It offers a perfect example of the function of a hypothesis. Much misunderstanding would be avoided if every one regarded all scientific "laws" as no more real and no closer to final truth than this ingenious human imagining of a luminiferous ether which no man has ever touched or seen or weighed, but which has been enormously valuable to the scientific study of the universe.

It was not till 1850 that this undulatory theory of light was established and generally accepted. Meantime, the study of electricity had developed a similar hypothesis. The phenomena of electricity had long been observed. The versatile mind of Benjamin Franklin (1706–1790) contributed a number of valuable conclusions, including the famous demonstration by sending a kite aloft in a thunder-storm that lightning was electricity. The great pioneer was Faraday (1791–1867). Gradually thought turned away from the old theories of electricity as a fluid to the modern conception of it as undulations of some medium. An electrical ether was conceived similar to the luminiferous ether, and Maxwell (1831–1879) produced evidence for the simple conclusion

that both electric phenomena and light were due to waves in the same medium, the light waves simply being more rapid than the electric. A German physicist, Hertz (1857–1894),



From a photograph by John Watkins, London.

MICHAEL FARADAY.

confirmed this theory by a series of brilliant experiments. Wireless telegraphy, wireless telephony, and the radio—the broadcasting, without wires, of music and speeches—use varying wave-lengths of the same electrical waves. The

name of radio refers to these radiant waves; it does not mean that radium or the electric waves produced by radioactive substances are involved. When it is added that this whole wave theory has recently been gravely questioned, the swiftly

Courtesy of E. Gottschalk.

FRANKLIN'S KITE EXPERIMENT.

changing outlook of twentieth-century science and the tentative character of its hypotheses can be understood.

It was in the last years of the nineteenth century that the revolutionary discoveries of radioactivity took place. In 1895 a German physicist, Röntgen, discovered mysterious rays like light which had the power to pass through opaque substances. He called them X-rays, and their use to secure shadow-pictures of the interior of the human body has since

become a commonplace of medical diagnosis. As in all modern scientific progress, a host of investigators aided, and the

From a photograph © the Wide World Photos.

MME. CURIE IN HER LABORATORY.

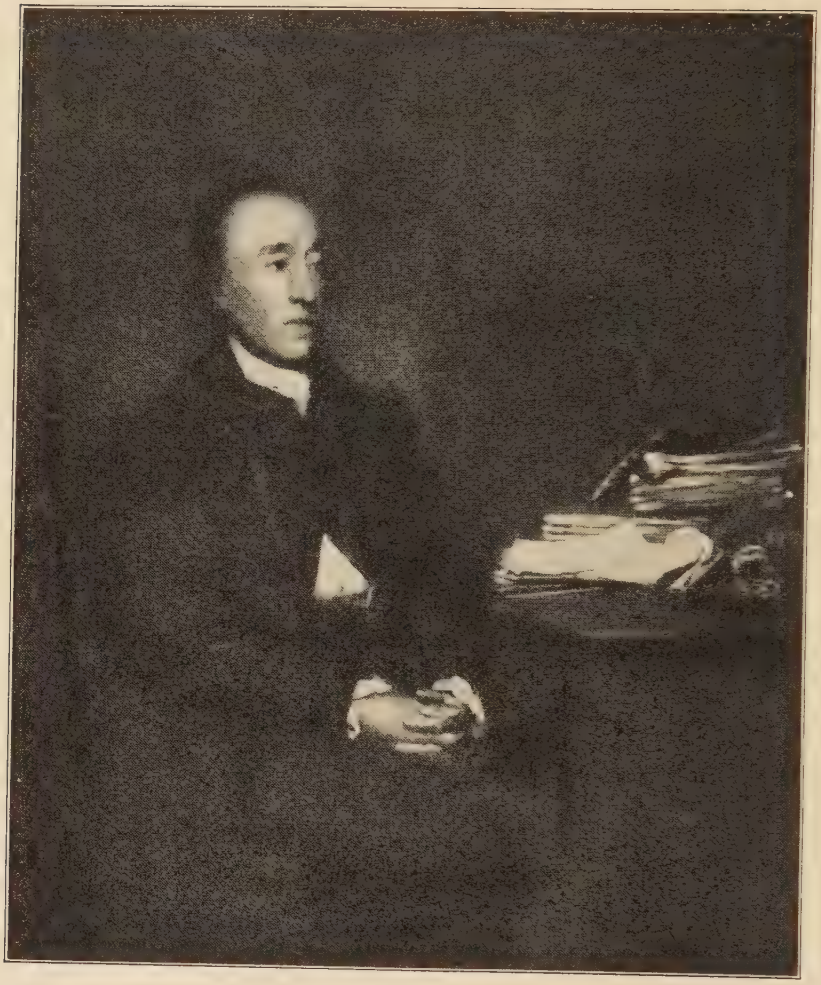
names mentioned are simply those who happened to take the more conspicuous steps. It was soon discovered that a number of substances gave off emanations having similar properties. Following this clue discovered by Becquerel, Pierre and Marie Curie isolated the new element, radium, in 1898. It

is exceedingly rare, and gives off emanations including rays similar to X-rays but of much greater penetrating power. Madame Curie worked on the hypothesis that these phenomena, now known as radioactivity, were the result of atomic changes, and this theory has since been widely accepted. Two English physicists, Rutherford and Soddy, have worked out a hypothesis known as the "Transformation Theory," now generally accepted, according to which the atoms of radium and similar substances undergo a spontaneous atomic disintegration, from which other radioactive substances are produced and which, in turn, break down. The process of transmutation of metals, which the alchemists sought, is thus taking place spontaneously in the case of these few substances. These discoveries have led to much far-flung speculation. The whole theory of matter and energy is being reconsidered in their light. Since great energy is exerted when a radium atom sends out its emanations, it has been argued that vast new sources of power have been discovered. Radioactivity has been viewed as a source of the sun's power, and the life of the universe in the past and for the future has been correspondingly lengthened. Along these paths of research lie fruitful fields of study. But never was there greater need of maintaining an attitude of philosophic doubt than toward these new hypotheses. The atom was purely a mental conception which aided chemists to achieve marvels of analysis. It still exists as a conception, but scientists have now broken up atoms, and thus revised its nature. They have

found within the atom electricity, which is merely a name for another mystery. The physicists have used the conception of ether in their labors with equal success. But it remains a hypothesis of lessening service. It can be seen that the brilliant progress of these two fundamental sciences has been based on a succession of hypotheses, and the truly scientific mind must hold itself free to transform its views as new conceptions appear in the future. Never was it clearer than to-day that the marvellous progress of science has constantly developed new problems, and that the total of this modern wisdom is no hoard of bright and shining coins, but rather a series of dissolving views, as when stronger and stronger telescopes reveal more and more intimate pictures of distant stars.

A new science of geology originated in the eighteenth century, and the oldest of sciences, astronomy, collaborated with it to conceive the arrival of the solar system as an orderly process of change from nebula to planets. The new science of biology, born in the nineteenth century, utilizing the resources of geology, of chemistry, botany, and zoology, traced the development of life from protozoon to man. In this fusion of new wisdom into what is commonly, though loosely, called the theory of evolution the service of Charles Darwin (1809–1882) was to provide the specific theory of natural selection, or the survival of the fittest, as a central explanation for the evolution of living things.

An Englishman, James Hutton (1726–1797), was the founder of modern geology. Before him, theories of the



JAMES HUTTON.
From the painting by Sir Henry Raeburn.

growth of the earth had conceived it as formed by a series of cataclysms. His service, aided by other observers, was to perceive that the earth had been shaped with inconceivable slowness by rain, rivers, and similar every-day forces. No radical

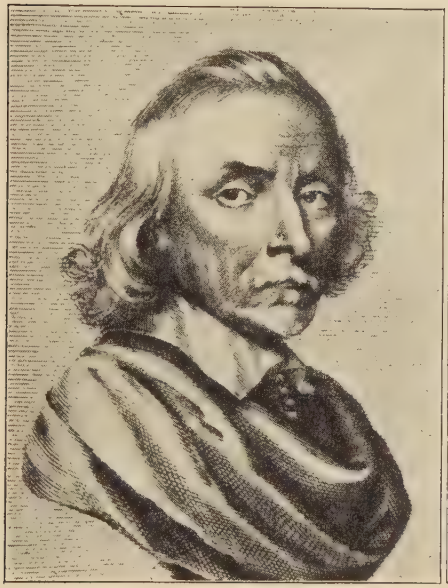
revision of this theory was necessary; but it has been supplemented by theories of the origin of the earth which regard it as having been once a nebular and later a molten mass, and by the discovery of gradual but none the less extraordinary episodes like the Ice Ages. Hutton looked for confirmation of his views in fossils, and early in the nineteenth century another Englishman, William Smith (1769–1839), surveyor by profession but a true scientist in the accuracy of his observations, brought forward proof of the stratification of rocks. Naturalists like the Frenchmen Lamarck (1744–1829) and Cuvier (1769–1832), who devoted much of their lives to the study of fossils and the founding of paleontology, aided in this geological progress. Without these relics of the past the progress of geology, as of biology, would have been greatly handicapped and retarded. Just as the Copernican theory fundamentally altered man's point of view, so the new geology challenged old conceptions by lengthening the life of the earth far beyond the 6,000 years allotted in the Bible, or the figures of other traditional versions of creation. It created a basis which made the slow processes of Darwinism conceivable.

Stirring and revolutionary were these years before and after 1800 when man's whole conception of his home was transformed. It was in 1796 that a French astronomer, Laplace, put forward the nebular hypothesis. He had done distinguished work in completing the study of the solar system. This casual suggestion conceived of the solar system as start-

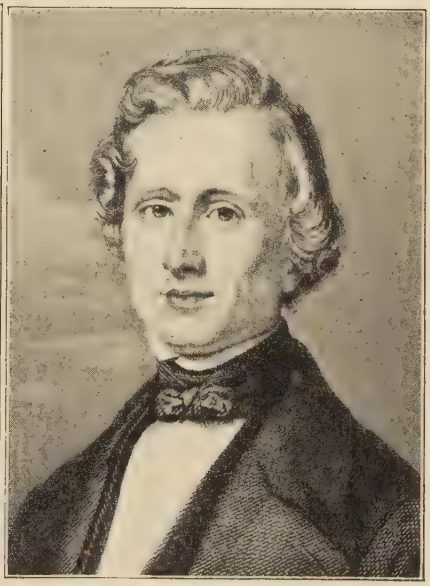
ing from a vast nebula in slow rotation. As it cooled, it threw off a series of rings which became the planets. The great German philosopher Kant (1724–1809) had conceived a nebular origin in 1755. But the Laplace picture attracted the attention of scientists, and it was not until recent years that an alternative theory, the planetesimal hypothesis, based on a tidal eruption through the near approach of two suns, of Professors Chamberlin and Moulton, of Chicago University, gained support. Highly speculative as is the nebular hypothesis in any form, and necessarily lacking in scientific proof, it played a stimulating part in the imaginations of the nineteenth century.

A vast amount of solid scientific work was done in astronomy through the co-operation of many observers which the modern spirit of science made possible. The most famous episode was the discovery of the planet Neptune in 1846 at the place in the heavens where a French astronomer, Leverrier, calculated it should be on the basis of peculiarities in the orbit of Uranus. An extraordinary accuracy has been achieved in measuring celestial distances, and it was through the refinements of stellar photography that apparent confirmation of the Einstein theory of relativity was obtained in 1919. This modification of Newtonian theories of space was suggested by certain discrepancies observed in the orbit of Mercury. It includes such difficult conceptions as curved space and a finite universe. Much of its content can be understood only by an expert mathematician, and it still belongs in the

realm of new and highly controversial hypotheses. It is another illustration of how far from finality are the most substantial of scientific hypotheses, even those so well established as to have received the misleading name of laws.



HARVEY.



LEVERRIER.

The science of living things was another creation of the eighteenth century. The Middle Ages had been satisfied with fantastic fairy-tales about animals, based on folk-lore, and often having a religious or symbolic meaning. Thus the salamander, which was so cold that it put out a fire if it fell into it, symbolized the saint whom hell could not burn. Some progress had been made through the ancient science of medicine, which the Greeks studied and the mediæval and Renaissance doctors practised, but with scant progress in fact or

theory, from the time of Hippocrates, the Greek. A pioneer observer in the scientific spirit was William Harvey (1578–1657), an English physician who discovered the circulation of the blood by adhering to the true doctrine that wise men must learn anatomy not from the decrees of the philosophers but from the fabric of nature herself. The eighteenth century saw a long line of naturalists who observed painstakingly and well—men like Sir Gilbert White, of Selborne (1720–1793). The ancient idea of evolution appealed strongly to the line of philosophers, to Descartes, to Leibnitz, Spinoza, Hume, and Kant. It found expression in the greatest of German poets, Goethe (1749–1832), as it had in Lucretius. As a subject for speculation the theory was common property and in the front of reflective minds by the eighteenth century. Among the pioneers in this field was Lamarck, who worked out a theory of organic evolution based on two propositions which have already been set forth: one, that animals developed their variations by use (*e. g.*, the giraffe acquired its long neck by efforts through generations to eat leaves above its head), and, two (necessary to make the first proposition effective), that characteristics acquired during the lifetime of a parent are inherited.

Thus when Charles Darwin began his years of patient study, the results of which have been outlined in the story of evolution, the conception of organic evolution was a familiar one, and the Lamarckian theory of how it operated was under debate. The "Origin of Species" was published in 1859. It

was in 1838 that the first thought of natural selection flashed across his mind, suggested by Malthus's work on "Population" describing the struggle for existence among human beings. Before that he had studied the methods of animal-breeding by which stock was improved by careful selection, and was searching for an equivalent factor in nature. The twenty years between he devoted to untiring study of the evidence. "Dogged does it" was one of his favorite mottoes. Darwin did not reject the Lamarckian method in all cases. He also recognized the value of sudden variations known as "sports." But he regarded natural selection between minute variations through the struggle for existence as the chief source of evolution, and he presented such a mass of strong evidence for his view that, for the first time, the theory of evolution received solid, scientific support.

The publication of the "Origin of Species" thus marked a new epoch in scientific thought. The theory of organic evolution has since gained general credence among scientific men. Nor has the theory of natural selection been overthrown. Its importance has, however, been lessened by a number of discoveries. Chief among these were the researches of De Vries, a Dutch botanist, and others who demonstrated that extreme variation producing "sports" was frequent enough to account for evolutionary development. This view accepts the Darwinian hypothesis of natural selection, but applies it normally not to minute variations but to sudden leaps. This modification of Darwinism would speed up the process of

evolution and fit it better to the time schedule of geology. Another debate has centred about the Lamarckian theory that acquired characteristics are inherited. The evidence thus far is against such inheritance; yet scientists have been slow to assert this negative, and the question is still open. In fact, the whole machinery of organic evolution remains in a state of uncertainty. The Darwinian hypothesis, so far from being the last word, was hardly more than the first. A vast amount of research remains to be done before the various means, including natural selection, by which evolution is achieved, can be weighed and determined. The theory of organic evolution rests on a broad base, including evidence from many sources. How it works, still remains a subject for scientific scepticism. In the general progress of biology, one other basic discovery of the nineteenth century was the cell. This was a slow development, the work of many minds, completed by the middle of the century. Through the study of this unit of life—protoplasm is the name given to the living matter of a cell—extraordinary progress has been made toward understanding the chemistry of life. Yet the complicated structure of protoplasm defies artificial composition. The secret of life remains hidden.

The ancient science of medicine, founded by the Greeks, maintained by the Arabians, and, after a period of decline, carried forward by the anatomists of the Renaissance, entered a new era through the researches of the chemists and biologists of the last two centuries. The discoveries of fact have

gone far ahead of its curative methods, still largely empirical and unsatisfactory save in the field of preventive medicine and surgery. After Harvey the great landmarks were the dis-

PASTEUR IN HIS LABORATORY.
From the painting by Edelfelt.

covery of vaccination as a preventive of smallpox by the English physician Jenner, in 1796, and the development of the germ theory upon the pioneer labors of Pasteur (1822–1895), the great French biological chemist. The germ theory was applied to antiseptic surgery by the British surgeon

Lister, and to the prevention or minimizing of a number of diseases by the use of antitoxins, as in the case of diphtheria, or in the case of yellow fever, by the elimination of a mosquito carrier of the specific germ.

Many other sciences originated in those centuries. None of them has yet achieved a secure footing. Economics or political economy was largely an English development culminating in the Utilitarian or Manchester school of thought which controlled the financial and commercial policies of Great Britain, and influenced the economists of the world for generations. Three major names mark its rise, Adam Smith (1723–1790), Bentham (1748–1832), and John Stuart Mill (1806–1873). Smith, though not the originator of political economy, was its first great mind. His theories, expressed in "The Wealth of Nations," laid the foundation for the faith in natural liberty and the system of laissez-faire which became the economic creed of England. Bentham was a philosopher and no economist, but he contributed to English thought the theory that the goal of society should be "the greatest good for the greatest number." He did not coin this conception but he gave it circulation and in a broad sense all the later developments of modern democracy proceeded from it. Mill deserves notice not only because he gave authoritative statement to the Utilitarian point of view, but because he typified much of his age in England. His life spanned the gradual shift from laissez-faire to humanitarianism.

Just as Darwin was the son of a distinguished scientific

father, so John Stuart Mill was the son of an able historian and philosopher, a strong Benthamite. He was taught Greek at the age of three, and had read Æsop, Xenophon, and Plato at the age of eight, when he began Latin, Euclid, and Algebra. But he was never an exact scholar of the classics—it was for the subject-matter that he was trained to read. Stemming from this intellectual aristocracy of England, of striking personality, master of a clear and persuasive style, he became a commanding figure of his time. Utilitarianism is a misleading term for the philosophy of economics to which he gave final statement. No materialistic standard was set up. The Bentham goal, "the greatest good for the greatest number," was sought by the path of self-interest, competition, and the law of supply and demand, freely working. Mill expounded these so-called laws of political economy with brilliant logic, but he lived to welcome their modification in the name of human liberty. The motive of his thought was moral, his sympathies were generous. Despite his logic, he became increasingly the advocate of the distressed and must be ranked

JOHN STUART MILL.
From a medal by Alphonse Legros.

as a great pioneer of modern social and political thought. The factory legislation, which will presently be described, derived from the sympathies of Mill if not from his logic.

Two lesser names have their place in the development of English economic thought, Ricardo (1772–1823) and Malthus (1766–1834). The former originated theories of rent which like all these early economic generalizations have been largely discarded. The latter fathered a theory of population which had a prolonged influence upon British thought. The Malthusian theory took count of the swift increase of population which marked the industrial rise of the late eighteenth century in England and asserted the law that while human beings multiplied in geometrical progression, the food supply could be increased only in arithmetical progression. The gloomy conclusion of this theory was that wage increases and charity were a mistake and that the threat of starvation was the only hope of the world. From such pessimistic economists came the designation of political economy as the "dismal science." Time has shown the Malthusian theory to be utterly unfounded. It has been abundantly proved that higher wages, increased comforts, and general well-being are a strong and probably sufficient check on large families. There could not be a better illustration of the danger of attempting to predict the future of society by sheer logic. Malthus based his theory on the past. He failed to imagine the human factors which were soon to become controlling and overturn all his predictions. Life holds perpetual surprises of this nature.

Little of this premature generalization by the early economists has stood the test of research. In the last generation an effort has been made to rebuild economics from the ground up, on the basis of statistics. Considerable progress has been made, but the science is still in its earlier stages of research. In psychology, while some experimentation and much interesting speculation have taken place, the difficulties of the subject have prevented agreement even as to a method of approach. Sociology and anthropology, among the newest of sciences, have made even less progress. The data of human actions and customs are exceedingly difficult to observe. Anthropologists have thus far devoted much of their time to speculative theories. Archæology has furnished much raw material for both anthropologists and historians. Its spirit of patient digging might be recommended to workers in all the new sciences which have been handicapped by a plethora of theory and a scarcity of facts. All these sciences are contributing to the data of modern history, a creation of the nineteenth century; but history, itself, remains as it began, essentially an art, not a science. Starting with myths, passing through the theological stage—the Augustinian, for Christians—when the past, like the physical world and the future, was arranged about a creed, history felt the force of all the tendencies of the nineteenth century. It passed through a romantic period when great men were exalted as the essence of the past; the dramatic and vehement Carlyle (1795–1881) was the greatest of these hero worshippers. Then

Buckle's "History of Civilization in England" (1857) turned minds toward the economic interpretation of history by stressing the effects of the material world, of food, soil and nature, in general, upon man. This has remained the controlling point of view down to the present. Yet this materialistic view of the past has been recognized as partial and unsatisfactory. Plainly a rounded historical method, giving due weight to every side of man's nature, must wait upon progress in psychology and other immature sciences; which is to say that the final history of any period or any people is still afar.

If no other achievement were to the credit of these two centuries than this progress of pure science, they would rank with the most extraordinary centuries in all history. In fact, it may well be doubted whether any discoveries save the elementary ones like fire and the alphabet are to be compared in importance with this vast accomplishment of these scientists. With the aid of them an endless chain of invention is possible. Without them, material progress would depend upon chance hits. The labor was the work of many, it crossed the boundaries of nations and of languages and it never halted.

Four major peaks of achievement can be distinguished. Newton's discovery of the law of gravitation (1686) was the first. Its echoes reverberated throughout the eighteenth century, toward the close of which another great era of scientific discovery arrived. The co-operative spirit was clear by

this time, and the decades on either side of 1800 saw achievements by many, including the founding of modern geology by Hutton, the chemical discoveries by Lavoisier, the nebular hypothesis of Laplace, and Lamarck's theory of evolution. Fifty years later, in the heart of the Victorian Age, the epochal work of Darwin came as the climax of a group of major discoveries, including the statement of the law of the Conservation of Energy. Finally stand the revolutionary discoveries of the twentieth century, especially the invasion of the atom, a period of far-reaching discovery in which we still live.

If new mysteries have appeared as each curtain of ignorance has been pushed aside and the early hopes of a complete explanation of the universe have been dashed, man has at least thrown his thought around the farthest star, and stands before a far clearer picture of his world than ever before. That picture is one of universal law. Science reveals neither the source of this order nor its purpose—it is silent as to whether there is a source or a purpose. It does, however, present a world as majestic in scale as it is united in essentials.

2. INVENTIONS AND THE INDUSTRIAL REVOLUTION

The revolution that science worked in man's mind the great inventions expressed in his external manner of life; and since actions form character, these changes in customs inevitably reacted on mind. Mentally and physically, these two centuries witnessed one of the epochal transitions in the

life of man. Yet the transformation of the physical scene has been so great that there is probably danger of overestimating the extent of the changes in man himself. The continuity of man's development survived centuries of conquest, torture, and pestilence; there is no reason to suppose that it is not surviving factories, cities, railways, telephones, automobiles, aeroplanes, and radios.

The inventions of the eighteenth and nineteenth centuries are as amazing as an "Arabian Nights' " tale. The following list of typical inventions gives the date of invention and the name of the inventor. Usually several decades passed before a machine came into general use. In every case the successful inventor was preceded by earlier men who failed by a narrow margin. In a number of cases it is difficult to award final credit to any one man.

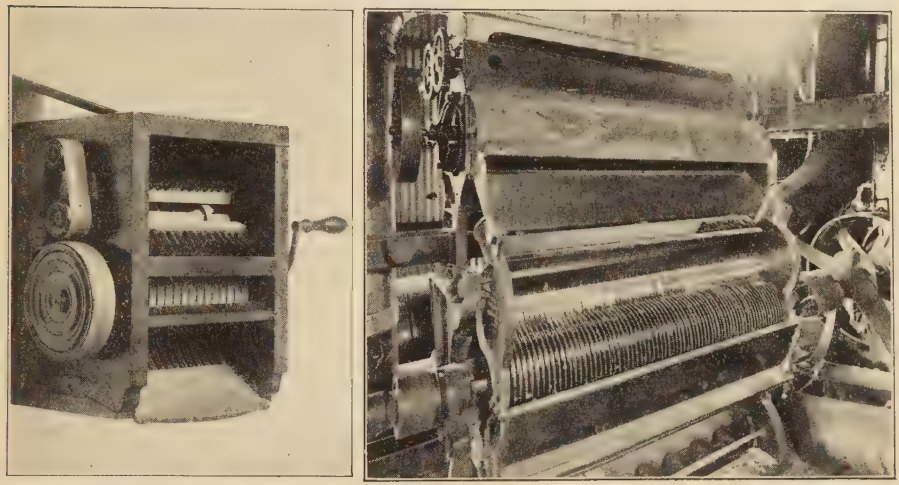
Spinning-jenny	1764	Hargreaves
Spinning-machine	1769	Arkwright
Steam-engine	1769	Watt
Power-loom	1784	Cartwright
Cotton-gin	1792	Whitney
Steamboat	1807	Fulton
Steam-railway	1814	Stephenson
Telegraph	1835	Morse
Bessemer steel process	1856	Bessemer
Electric light	1870–1878	
Telephone	1876	Bell
X-rays	1895	Röntgen
Automobile	1890–1900	
Aeroplane	1903	Wright Brothers
Wireless		Marconi
Radio broadcasting		

EARLY TYPES OF AIRPLANES AT RHEIMS DURING AVIATION WEEK IN SEPTEMBER, 1909.

The large bird-like plane in the foreground of the painting is the *Antoinette* (50 h. p.) guided by Hubert Latham. The second is the Wright biplane (30 h. p.), one of the seven Wright machines that took part in the flights. The third is the Bleriot monoplane (50 h. p.) in which the inventor had crossed the English Channel a few days before.

From a painting by Charles Hoffbauer.

The inventions of these two centuries fall into three general classes. They increased production in industry by substituting machines for handwork; they accelerated transport and communication; or they increased health, convenience,



(*Left*) WHITNEY'S COTTON-GIN.
From a model in the National Museum, Washington.
(*Right*) A MODERN COTTON-GIN WITH BREAST REMOVED AND GRIDS AND SAWS EXPOSED.

comfort, luxury. Some inventions, like the telephone, belong in all three categories. All united in effecting the industrial revolution which began in England in the last quarter of the eighteenth century and is still spreading around the world. This revolution was no swift change, completed in a few years, like a political revolution. It was and is a long and continuing process, advancing at different speeds in different countries, and reaching conservative China, for example, only to-day. The essential feature of the factory, quantity

production, has recently been developed to a new height in American mass production that constitutes the latest stage in the industrial revolution, with social and economic consequences still to be determined.

As the above list of inventions discloses, the first inventions came in the cotton and wool industries, and spinning and weaving first felt the effects of the change. These early inventors were all Englishmen, and England led the world in introducing the new order, thereby gaining an industrial and financial head start over the rest of Europe that brought her in the nineteenth century the financial leadership of the world.

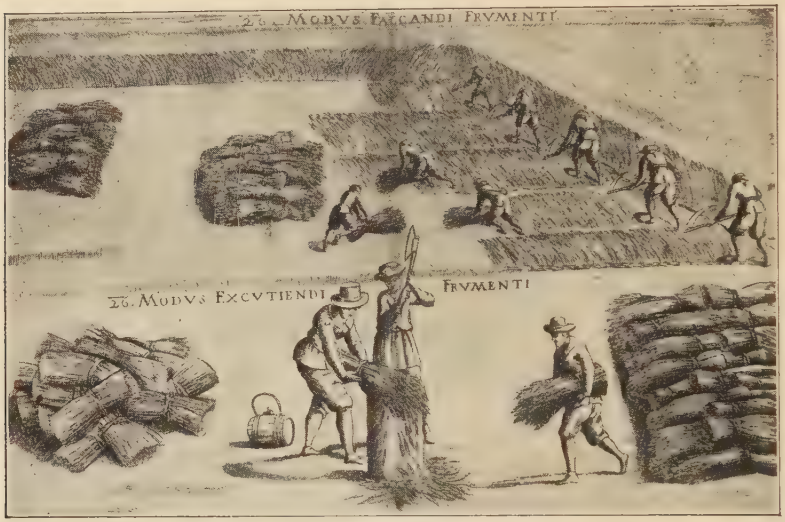
On the economic side the changes were striking and advantageous. The wealth of England was greatly increased. Her population doubled in seventy years and her merchants led the commerce of the world. Great cities sprang up around the factories, the outward emblem of the industrial era. The enormously complex organization of modern society began to develop whereby the old self-subsisting village units growing their own food and making by hand in small shops the clothes and other necessaries of life were ended, and large, highly specialized communities succeeded them, manufacturing in quantity one or a few products, which were shipped afar and thus exchanged for the varied needs of life. The development of railroads was an essential link in this new organization. They had been preceded by turnpikes and canals. It was around the middle of the nineteenth century

that the building of railways became rapid. Ocean steamships built of iron became effective carriers of cargo a decade later.

The human story of the industrial revolution had a dark beginning by comparison with the brilliant economic success. The mere dislocation of the social organism which machinery produced caused great hardship. Villages decayed, cities sprang up, ill-ordered and unhealthy, unemployment was chronic. In addition, the laissez-faire theory of government and economics which prevailed in England permitted a terrible abuse of the factory workers. Men labored at Manchester from twelve and one-half to fourteen hours a day as late as 1825. Children worked in cotton-mills from 5 A. M. to 8 P. M. Some of them were under five. Many were pauper apprentices, bound to labor till twenty-one for their food and lodging, in effect, slaves. Long hours of labor had been the rule for centuries, and it is not fair to judge these days by modern standards. But most of the factory-owners felt no humane obligation to care for their laborers; though the old-fashioned, independent worker had a long working-day, he was master of his own day and suffered neither from rigid control nor exploitation by a greedy employer.

Relief came from two sources—from humane laws and from the organization of unions. The British Factory Act of 1833 was a landmark of social reform. It cut the working-day of children under eighteen to twelve hours a day. A long line of protective legislation followed. Trade-unionism dates from 1825 in England, but it did not become effective till

several decades later. The first unions were secret organizations and were bitterly fought by employers and the government. The decade beginning 1840 was one of great hardship and starvation. Thereafter came prosperity, and the lot of



REAPING AND BUNDLING GRAIN.
The method pursued almost from Biblical times to the invention of the reaper.
From a copper engraving by Veranzio, made in 1617.

the British worker has unquestionably improved greatly in the nineteenth century. Hours have been shortened and it has been estimated that since 1830 wages have doubled. After a dismal and tragic beginning, lasting a century, the increased wealth produced by machinery has now for many decades been increasingly shared with labor.

One unfortunate accompaniment of the rise of industry in Great Britain has been the increasing hardship of rural life. The century from 1750 forward saw the final decline

of open-field farming upon a communistic basis, which had been part of the old village and manorial system of England, and the rise of the modern system of enclosed, privately owned farms. Each villager owned a farm, but it was com-

A MODERN HARVESTER.
It cuts the grain, gathers and ties it into bundles.

posed of strips scattered in great fields—of rye, of oats, of wheat—and these fields were tilled jointly by all the farmers working together. There were also the common lands where all the live stock grazed together. The old system was inefficient, for the good farmer could not reap the results of his own industry and skill. Community planting and grazing delayed improvement in agricultural methods. "Enclosure," the method whereby fenced farms were formed, began in the sixteenth century through the great increase in the sheep industry. It was resumed in the eighteenth century as part of an agrarian revolution which applied modern agri-

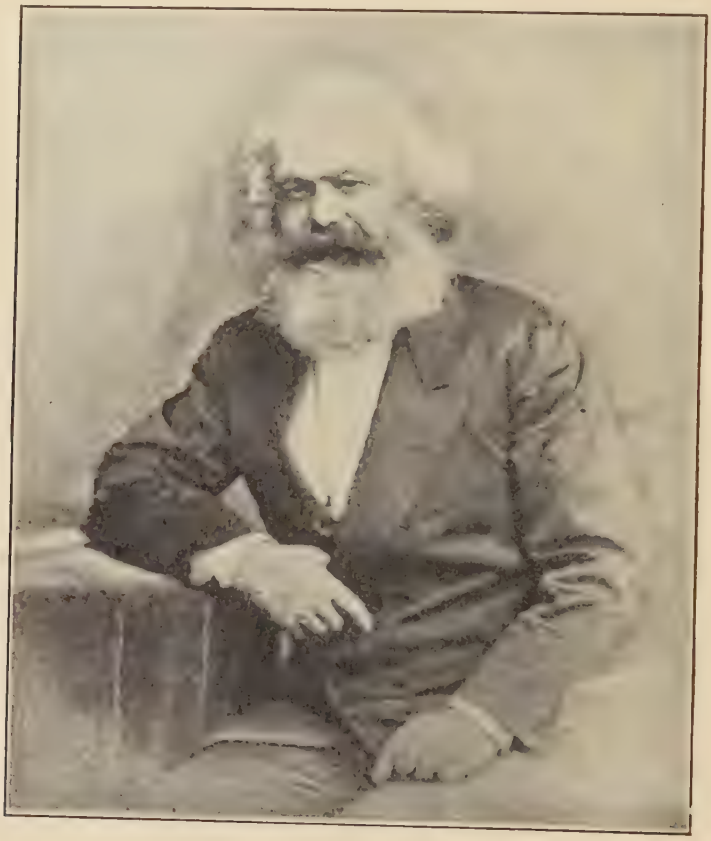
cultural knowledge to farming, largely dispossessed the small landholder, and, while greatly increasing the national output, caused wide-spread suffering and hardship and depopulated whole villages. The parallel with the industrial revolution is clear. Unfortunately, the remedy has been less satisfactory. Many laws have been passed in an effort to better the lot of the farmer, but he has not fared as well as the factory workers grouped in large cities, and more easily organized to insist upon their rights.

The story of Great Britain's industrial revolution was repeated later in France, in Germany, in the United States, throughout Europe. It began at different times in different countries, and no uniform rate or manner of change prevailed. Germany, for example, remained a peasant nation until after 1870, when her industrialization was accomplished with amazing swiftness and efficiency. Her population increased rapidly, as had England's. Instead of blundering through hardships toward prosperity, government regulation saw to it that the new order developed with a minimum of dislocation. Science as applied to industry reached new levels of effectiveness in the German technical schools. The prosperity of the peasant was protected by effective legislation. Under the genius of Bismarck, the laissez-faire policies of England were rejected, and governmental regulation provided the most enlightened aid—for worker and capitalist alike. The industrial revolution entered France slowly, and the nation has remained a self-subsisting unit, balanced be-

tween agriculture and industry, with the peasant still a powerful factor. Her population has increased little. America has reached the point where her farming, long her chief industry, is being passed by her manufacturing. The problem of maintaining the prosperity of her agriculture is already at hand. The revolution has touched the barbarian regions of the world only as it has brought the strong arm of the colonizing powers among them to secure raw materials in ever-increasing quantities. Here, too, the machine first wrought cruelty and hardship, and only recently has a more humane spirit begun to develop. Industry, itself, has now begun to enter the most advanced nations of the East—Japan, China, and India. Its effects remain to be seen. In Europe the revolution has touched only scattered areas of such isolated and conservative nations as Spain and Russia.

The machine produced its political reaction in socialism. The first stages of the doctrine appeared in the 1830's, in France and England, among idealistic thinkers whose Utopian theories caused such distant echoes as the Brook Farm colony in America. It took definite form in its second phase and became a powerful political force in Europe under the inspiration of Karl Marx (1818–1883), whose famous pamphlet, "Communist Manifesto," appeared in 1848. He brilliantly upheld the view that a class struggle exists between workman and capitalist, and that it can be solved only by the creation of a Co-operative Commonwealth in which all productive capital is owned by the state. He urged work-

ing men to unite regardless of national boundaries, and he drew up the constitution of the first International, which was formed at London in 1864. Strong socialist parties developed



KARL MARX.

in Germany, France, and other European countries, and the Labor party in England adopted much of its point of view. The third phase came with the theory of direct action, in the form of syndicalism in France before the Great War, and of Bolshevism in Russia during the War. This view adopted

socialism as the goal, but stressed direct, non-political methods of achieving it. The Bolshevist dictatorship of a minority first installed Marxism in a great nation. In most other nations, while the central tenet of socialism, state ownership of productive capital, has been rejected, much legislation of socialistic tendency has been passed. Privately owned property affected with a public interest, like railroads, has been so regulated as to rates, etc., as seriously to reduce its freedom of action. Except for the test of state socialism in Russia, it may fairly be said that pure Marxism has made little progress, and that its chief influence has been to strengthen the state's control of private property.

Popular education and woman suffrage were two more developments in the wake of the industrial revolution. The real emancipation of children in England began in 1876, when reading, writing, and arithmetic were made compulsory for every child. France followed a decade later. The German Empire had preceded both England and France in abolishing illiteracy. The percentage of those who cannot read or write is still high in such countries as Spain and Russia. It is considerable in the United States. The woman's movement began in England as an idealistic demand for equality with man. As women entered industry, this demand was reinforced upon practical grounds. Important property rights were granted in a number of countries, placing women more nearly on an economic equality with man, educational opportunities were greatly increased, and, following the World War, the

ballot was granted to women in the United States and in England. (Norway, Denmark, and Finland had granted suffrage yet earlier.)

One other accompaniment of the machine, the most important of all—democracy—remains to be mentioned. It must be treated separately in connection with the labor pains of the great revolutions which brought it into being.

3. THE OLD ORDER

England

England in the eighteenth century was a most interesting and agreeable spot for the upper classes. The political wrangling had been settled in conservative fashion in 1689. The dull Hanoverian dynasty was imported in 1714, and over it was placed an aristocratic Parliament that represented the nobility and the well-to-do. So England remained governmentally until the Reform Laws of 1832. The stupidity of one sovereign helped lose her American colonies; and the French Revolution and Napoleon spoiled the sleep of her citizens at the turn of the century. But in the main it was a period of stability and content. Similarly the religious wrangling had been settled by the tolerance established in 1689, and freedom of the press became the law of the land. In this peaceful afterglow of the Renaissance there flowered an amazing array of personalities, highly individual, cultured, entertaining. The Augustan Age it has been called. Not much creative literature of the first rank came out of this polished era until

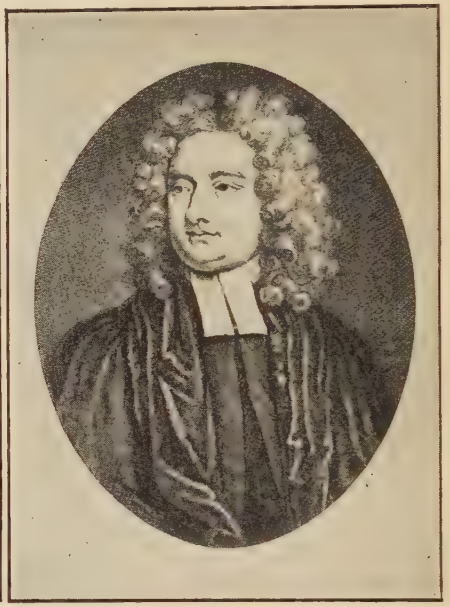
the Romantic movement brought new life toward the end of the century; but its letters and memoirs are the best of reading. It would be hard to equal the century, in any other time or place, in this item of individuality. The flavor of Swift, of Bishop Berkeley, of the Pitts, of Doctor Johnson, the last of the Tories, of Burke, of Fanny Burney, of Robert Walpole and Samuel Pepys and John Fox, is unique. The record is a sufficient warning against easy generalizations about classical decadence. Granted the right stock and the right atmosphere of individual freedom and any age, even a fading classicism, can match the best.

Yet it is not difficult to see the weakness of the age. Certain stalwart minds—Swift (1667–1745), one of the greatest of satirists, and those tellers of robust tales, Defoe (1660–1731) and Fielding (1707–1754)—show no signs of decline. No more does the philosophy of Bishop Berkeley (1685–1753), disciple of Descartes and Locke and brilliant advocate of the view that nothing exists apart from mind. By thus stressing the mystery of consciousness and the fact that all philosophy, all science, the universe itself, are inconceivable apart from mind, he set modern philosophers their gravest problem. The lyric genius of Burns (1759–1796) and of Blake (1757–1827) is equally beyond question though neither is wholly of his age. The former in his love of nature and reach of emotion looks forward to the romantics soon to arrive, the latter back to the religious mysticism of Donne.

In contrast with these unquestioned geniuses, spontaneity

is fading from the essays of Addison and Steele, and from the verse of Collins and Pope, despite their polished style and brilliant wit. The spirit of neo-classicism, that insists upon

RICHARD STEELE.
From the painting by Richardson.



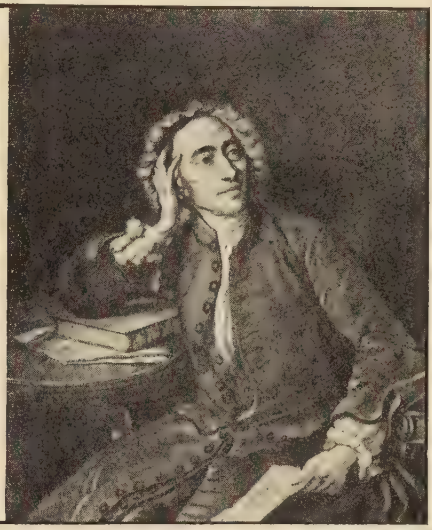
JONATHAN SWIFT.
From an engraving by George Vertue.

form at the sacrifice of imagination, takes command. It was against this false classicism that Romanticism revolted.

The outstanding literary growth of the century in England was the development of the novel, a form that was peculiarly fitted to express the British mind of the nineteenth century. The great Swift, terrible in satire, told an absorbing tale in "Gulliver's Travels." Defoe's "Robinson Crusoe" lives as one of the greatest stories of adventure ever written.

But it was Richardson, of lesser stature, who turned the novel to its modern task of depicting character and portraying emotions. Thereafter Fielding, a genius of the first rank, carried

JOSEPH ADDISON.
From the painting by Sir Godfrey Kneller.



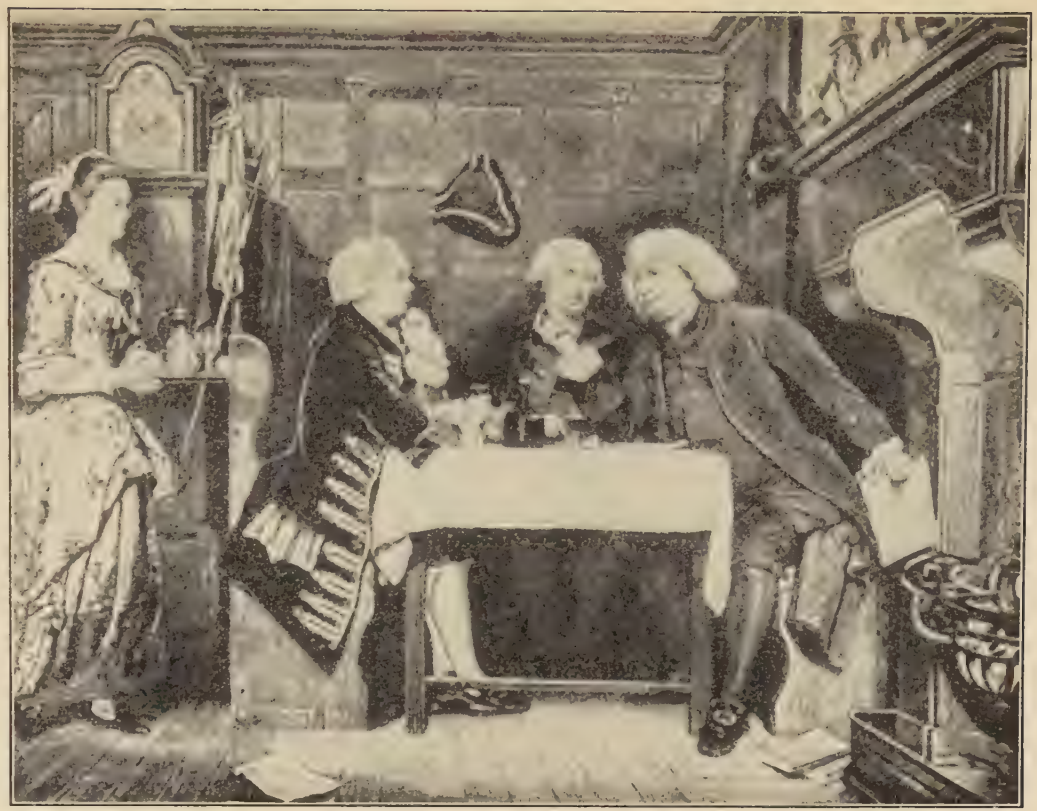
ALEXANDER POPE.
From the painting by J. B. Vanloo.

the form to maturity in "Tom Jones," one of the great English classics. Smollett and Sterne rounded out this vigorous achievement in prose that went far to offset the decline in poetry.

But, as befits the century, the most typical literary figure of the age was not a writer of great genius but a vigorous personality, the uncouth, outspoken, and unforgetable Doctor Johnson (1709–1784), who lives not in his own books but in his life written by the worshipping Boswell, himself the greatest of contemporary biographers.

Politically England had taken no radical step in the so-called revolution of 1689. With a spirit of practical conservatism that was typically English, her political leaders had continued an oligarchy in power. The British Parliament took command to develop slowly that system of responsible cabinet government through a prime minister appointed by the crown, but dependent upon maintaining a majority in the House of Commons, which was to be imitated throughout democratic Europe in the nineteenth century. In the eighteenth century leadership shifted between the two parties of Whigs and Tories, the former largely Dissenters and merchants, the latter largely Anglicans and landowners. Robert Walpole (1676–1745), Edmund Burke (1729–1797), and Charles James Fox (1749–1806) were the great Whig leaders; William Pitt, earl of Chatham (1708–1778), and his son, William Pitt the Younger (1759–1806), the outstanding Tories. It was an era of brilliant political leadership based on vast and undisguised corruption. The rotten-borough system solidified the control of Parliament within the grasp of the few. Bribery was the normal means of securing votes in Parliament. Graft upon a colossal scale was the rule in public administration. Yet on the whole it was a period of governmental success for England. The Seven Years' War (1756–1763) conducted by the elder Pitt gained India and Canada from France. The loss of the American colonies was the only considerable setback the empire sustained.

It was an age of large landed estates, of honest yeomen,



GOLDSMITH, BOSWELL, AND DR. JOHNSON AT THE MITRE TAVERN AFTER THE FIRST PERFORMANCE OF GOLDSMITH'S "GOOD-NATURED MAN."

From an engraving after the picture by Eyre Crowe, A. R. A.

of stage-coaches, of country squires, of gambling, and heavy drinking. As a natural incident of this comfortable aristoc-

THE PARSON'S DAUGHTER.
From the painting by George Romney, in the National Gallery, London.

racy, the great portrait-painters of the eighteenth century developed, with Reynolds, Gainsborough, Romney, at their head, the first rich flowering of British pictorial art.

In the Middle Ages, in the Renaissance, history is largely

built about dynasties. Rulers like the Medici, Charles V, Henry VIII, Louis XIV, waged war, chose creeds, set the style, much as they willed. Underlying economic forces, religious faith and the power of great institutions like the Church controlled in the long run beyond the ability of potentates to obstruct or alter. From decade to decade, the leadership of a strong king was paramount.

In the eighteenth and nineteenth centuries the dynastic rulers of importance are exceptions in a plot that increasingly centres about plain citizens, either as laborers, voters, or members of a mob, and their heroes. Behind the scene of the whole modern drama stand the scientists and inventors, largely invisible and unnoticed, yet determining by their machines and discoveries the habits and lives of every one.

So there is little to note regarding these latter-day kings of England. After William and Mary, the latter's sister, Queen Anne, ruled amid general calm from 1702 to 1714. Under George I (reign: 1714–1727) and George II (reign: 1727–1760) Parliament increased its sway. The long reign of George III (1760–1820) saw an effort to restore the powers of the crown. It failed completely. England entered the nineteenth century to face the full tide of industrialism as she had entered the eighteenth, an efficient aristocracy. Important civil rights, of religious freedom, of free speech, of trial by jury, were assured to every man; and monarchy was safely hobbled for all time. Political freedom, which is to say democracy, was still afar. Yet, plainly, the lot of the Eng-

MRS. SIDDONS AS THE TRAGIC MUSE.

From the painting by Sir Joshua Reynolds, in the collection of the Duke of Westminster.

lish people was secure and contented enough to prevent all chance of violence. The example of the French Revolution stirred radical hopes. Thomas Paine (1737–1809) preached antimonarchism in "The Rights of Man." Development and compromise over many years prevented political revolution in the very country where the industrial revolution made the forces of change most active.

France

Superficially there were many resemblances between England of the eighteenth century and France of the Ancien Régime (which is to say the "former system") before the Revolution. The aristocracies of the two countries were, in fact, in close contact. If no English king was as profligate as Louis XV, the great-grandson of Louis XIV, who reigned from 1715 to 1774, the atmosphere of gaiety and frivolity in the life of the nobility of France was the Gallic equivalent for the more robust high living of the ruling classes of England. Events proved that the former were dancing over a volcano of popular discontent that was to burst forth in a bloody revolution. England not only escaped violence at this time but, a generation later, when the industrial revolution developed grave evils and discontent in England, beyond anything on the Continent, a peaceful extension of the ballot again forestalled serious trouble.

Certain obvious causes of this divergence can be set down. It is impossible to rate their relative importance or to say that

other and more fundamental facts of national character were not controlling.

The political and economic contrast has already been suggested. England had retained her monarchy, but had placed over it a Parliament representing an aristocracy of merchants and large landowners. If here was anything but democracy, there was at least a broader base for government which, coupled with the important safeguards of liberty won through the centuries from Magna Carta to the Bill of Rights, provided an efficient government and prevented excessive taxation and other abuses. France had retained the absolute monarchy which Louis XIV had crystallized into a divine and unchangeable despotism. The old French "parlements" were merely provincial law-courts which sometimes criticised and opposed the king's laws but could not veto or alter them. When discontent became intense in the reign of Louis XVI (reign: 1774–1793), the only available body representing the whole nation was the Estates General, which had not met for a century and a half. Had the kings of France been great administrators, they might at least have given their country the efficiency of a benevolent despotism. Louis XIV took his task seriously, but his egotism was his only first-rate gift. Louis XV was a wastrel, Louis XVI a solemn blunderer. The nation lost the bulk of its American colonies to England. High taxes kept the peasants from prosperity. It was a period of elegance and luxury for the nobility, of incomparable grace and measured beauty in art. For

L'EMBARQUEMENT POUR CYTHÈRE.

From the painting by Watteau, in the Louvre, Paris.

the lower classes it was an hour of discouragement and discontent.

In art the period was one of rare grace and charm, reaching the original genius of Watteau (1684–1721) and falling back into a rigid classicism that produced the Empire style as the century was ending and Napoleon was arising. Yet the pencil of Ingres (1780–1867), trained therein, ranks with the greatest. The literature of the old order was largely, as in England, composed of letters and memoirs, and otherwise of small importance. The great school of Molière disappeared in mediocrity. The great writing of the century looked toward the future, not the past, and belongs properly in the next section. Even Voltaire, who has been called the last of the old era, stimulated profoundly the new. The intellectual leadership of Europe fell to France in the new movement, and it arose despite the old order, in no wise from it.

Russia, Prussia, Austria, and Poland

The eighteenth century has been called the age of enlightened despots. Russia had Peter the Great and Catherine II, and prospered greatly. Frederick II, called "The Great," brought Prussia to the rank of a great power. For Austria Maria Theresa and Joseph II did all that could be done for their backward and diverse peoples. By contrast, Poland, lacking a strong or unified government, was partitioned almost off the map.

The vast territory of Russia, largely Asiatic in blood, was

still Asiatic in customs and dress when Ivan the Terrible ruled over it in the sixteenth century in the height of the Renaissance. By sheer, barbaric power Peter the Great (reign: 1672–1718) did much to rebuild Russia and Euro-

ST. PETERSBURG AT THE TIME OF CATHERINE THE GREAT.
From an engraving after a contemporary painting by B. Paters.

peanize the externals of Russian life. He took the Baltic provinces from Sweden to get a "window on the sea," and built St. Petersburg in a Baltic marsh as a new European port to displace the ancient inland capital, Moscow. Russia continued her advance under the sway of the notorious Catherine II (reign: 1762–1796), one of the ablest and most despotic of rulers.

The rise of Prussia really began with the rise of Branden-

burg, of which the small town of Berlin was the capital. The petty house of Hohenzollern bought this negligible electorate in the fifteenth century, added to it steadily, and under Frederick William (reign: 1640–1688), the Great Elector, extended its scattered territories from the Rhine to the Baltic. In the east had been added the separate duchy of East Prussia, a Slavic territory colonized by returning crusaders (Knights of the Teutonic Order) in the thirteenth century. The son of the Great Elector took the title of "King in Prussia." His grandson, Frederick II, the Great (reign: 1740–1786), greatly enlarged the kingdom at the expense of Austria and of Poland. Frederick was a military genius of the first rank and a cultivated and benevolent despot. From Poland he took West Prussia, thereby closing the gap which had separated East Prussia from Brandenburg. From this house of Hohenzollern came the first German emperor, William I, and William II, his grandson, who lost his throne in the World War. The kingdom of Prussia had become by the end of Frederick the Great's reign a strong military power and the leading German state.

The medley of races and languages and peoples which composed Austria was brought together by the ancient house of Hapsburg. Its capital was Vienna, and the territory round about included the most southeasterly members of the Teutonic race. To this was added the large kingdoms of Bohemia to the northeast and Hungary to the east, the former largely inhabited by Czechs who were Slavs, and the latter by Mag-

FREDERICK II AND VOLTAIRE AT SANS SOUCI.

Frederick, at the head of the table, is engaged in conversation with Voltaire, the second on his right hand, while other distinguished men of the time listen with interest.

From a painting by Adolf Menzel, in the National Gallery at Berlin.

yars, themselves a mixed breed of Turko-Slavic ancestry. In addition there were Croats and Slovenes to the south, Italians in northern Italy, and, for a while, Flemish and Walloons in

the Netherlands. The seventeenth century brought the climax of the Turkish threat to Europe and, as was noted before, Vienna was besieged by the Ottoman troops in 1683. Thereafter Austrian and Venetian arms prevailed and the Turks were driven back beyond the Carpathians. They still held a great empire in Europe where now is modern Serbia, Bulgaria, Roumania, and Greece, to say nothing of territory surrounding the Black Sea. When Frederick the Great took Silesia from Austria in 1748, Maria Theresa (reign: 1740–1780) set out to recover her lost territory, and the Seven Years' War (1756–1763) that ensued was heard round the world. The first motive behind the war was the Austrian desire to curb Prussia; in the alliance against the new kingdom were assembled Austria, France, Russia, and Sweden. The war had scant results in Europe. In America it decided the issue between England and France. The French and Indian War that began in 1754 between the English and French colonists was won by the English largely because of France's involvement in the war against Prussia. Wolfe's victory at Quebec in 1759 won all Canada for the English. French interests in America were practically wiped out by the farther cession of the territory beyond the Mississippi to Spain. Similarly in India, England won the beginnings of a great colonial empire from the French. The dispute between Maria Theresa and Frederick the Great shifted the frontiers of empire in three continents. Joseph II (reign: 1780–1790) was another intelligent and benevolent despot, and he did his

utmost to weld his diverse subjects into some sort of national unity. But the task was hopeless. Austria-Hungary, like the Balkan States to the southeast, remained a source of conflict down to the World War, which was set in motion by an Austro-Serbian dispute.

Meantime Poland had been three times partitioned. Her nobles had preserved a feudal anarchy, tying the hands of the king and preventing the development of a representative government. In the National Diet unanimity instead of a majority vote was required for action. The king was elected by the nobility and could do nothing without the consent of the Diet. As a result, her surrounding neighbors helped themselves to her territory at will. The first partition of 1772 gave West Prussia to Prussia, White Russia to Russia, and Galicia to Austria. Poland experienced a brief rebirth as a reaction to this assault; but in 1793 the powers carved again. Prussia, Russia, and Austria advanced their lines yet farther. A Polish patriot, Kosciusko, who had fought under Washington in the American Revolution, led a brave revolt; but Russian numbers prevailed on the field of battle, and the remnants of the great Polish kingdom were finally, in 1795, divided among the three surrounding powers, Russia taking the lion's share. It was a century of strong personalities and despotic leaders before whom Poland, weakly led and torn by countless rivalries, fell an easy victim.

MARIA THERESA.

From an engraving after a painting by Martin de Meitens.

4. REVOLUTION AND DEMOCRACY

The arrival of democracy, in a political sense, one of the major changes of the nineteenth century, was marked by a series of explosions. The first was the French Revolution, and it remained the loudest until the Russian Revolution surpassed it in bloodshed and terror. From this extreme, the disorderly and spasmodic advances of democracy ranged down to lesser revolutions in Germany and Italy and mere rioting in England and the United States.

The movement seems to be a clear case where an idea preceded and helped set in motion material causes. The conception was developed in France in the eighteenth century, long before the effects of the industrial revolution had entered that country. There was grave discontent in agricultural France. But there had been serious unrest in Paris before, notably in the Fronde, or civil war, of the seventeenth century. The poverty of the French peasant at this time has been much exaggerated. While it is impossible to analyze the causes of great popular movements with accuracy, it is clear that the intellectual ferment of the eighteenth century played a considerable part in bringing the situation in France to a head. It is perhaps safe to say that without brilliant and original minds to forecast a new order and a good level of native intelligence among the people to understand it, there would have been no overturn.

For the other side of the picture, the establishment of de-

mocracy in France upon a secure basis was postponed until the industrial revolution had arrived. Violent oscillations followed the Revolution, and the country was torn between dictatorship, or monarchy, and radical democracy. It was not until the arrival of the third republic in 1870 that the violent forces set loose in 1789 approached an equilibrium. In England, where representative government made slow but steady progress, democracy arrived in the wake of the industrial revolution gradually with a minimum of violence. It seems clear that the development of democracy was related to the spread of the new industry. Yet here, again, it is dangerous to be dogmatic, and safer only to point out certain obvious relationships. The factory system at once imposed a new demand on the state—that it regulate conditions of work. It thereby greatly increased the people's interest in government. With each new complexity of social organization added by a machine, by the railroad, by the steamship, by electricity, the obligations and functions of the state were enlarged. The modern mind often wonders why the peoples of Europe endured despotism so long. One answer is that in a primitive agricultural community there is little for a government to do except to fight wars and maintain order, and the peasant is largely indifferent to what happens in the high places of his country, so long as his land is not fought over too often. The factory system also created large cities, and cities have always been the breeding-spots of radicalism. Groups of men having similar interests were thrown together

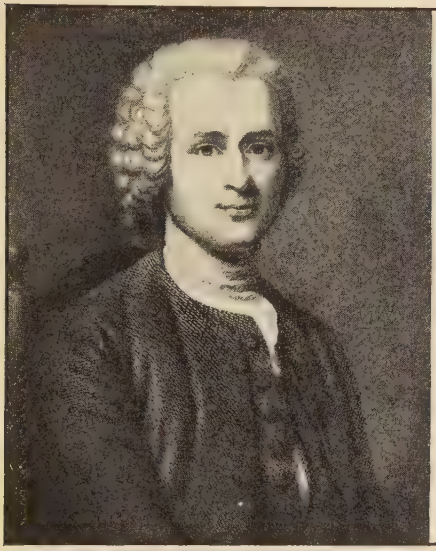
for the first time, and the organization of popular movements was stimulated. For a third point, the swift increase in the means of communication made democracy physically practicable. Without railroads, without the telegraph, without newspapers, modern democracies could not have achieved even the beginnings of effective public opinion which have thus far been developed.

It can be seen that democracy is not a simple conception, and that the arrival of political democracy is but one step in a long process of change. The rise of the common man to political power has been closely interwoven with his changed industrial condition and both are parts of a wider social revolution which may be regarded as the most important fact in a true democracy. The order of development has roughly been, first civil rights (trial by jury, for example), next political rights (the ballot), then industrial power (whether through unionism and an increase in bargaining power or by sharing in profits or management). What may loosely be called social democracy centring around such facts as the abolition of nobility based on inheritance and the fostering of opportunity for all, is more difficult to analyze and bears no necessary relationship to any of the other conditions of democracy.

The growth of the democratic spirit in England has been a gradual evolution. In America, likewise, there was no sudden reform. France rushed to the extreme of the democratic ideal in her revolution, declaring the complete rights of man,

civil and political, for the first time; but reaction set back the hands of her clock for three-quarters of a century. It is difficult to make accurate comparison between the nations in respect to the quality of their democracy. England is sometimes referred to as, to-day, the most democratic nation; but this assertion applies only to her politics. Thanks to her responsible cabinet system, her government is more immediately responsive to popular will than is the American. In France, the power of an entrenched bureaucracy of office-holders has reduced the effectiveness of the ballot. But both America and France have outstripped England in the important item of social democracy. Partly this is due to the fact that both countries have abolished an inherited aristocracy. More fundamentally, it is probably born of old habits and customs; "fraternity," one of the three words in the motto of the French Republic, dates from Revolutionary times; the pioneer spirit which formed American character has kept the country a land of friendliness and opportunity despite the rise of great fortunes. The shades of meaning in all these words vary so as to make comparisons difficult. All the ultimate facts of democracy, of the citizen before the courts, at the ballot-box, in the day's work, in community life, defy statistical presentation. This vagueness dismisses much history and much political theory to the realm of guess. The complexity of the democratic movement, the ambiguity of its terms and the haziness of its human facts, must be borne in mind throughout this section.

The intellectual ferment of the eighteenth century came from two different sources. One was the new science and reason, typified in Voltaire (1694–1778); the other was nature



JEAN JACQUES ROUSSEAU.
After the portrait by M. Quentin de la Tour.

DENIS DIDEROT.
After the portrait by L. M. Vanloo.

and emotion, dominating the new movement known as romanticism, of which Jean Jacques Rousseau (1712–1778) was the apostle. Of the two forces, the latter was by far the more potent. Romanticism gave the pervading tone to the mind of Europe for more than a hundred years, down through the nineteenth century, in fact. It produced a great literature in England, in France, in Germany, in which revolution played an inevitable rôle. The rationalism of Voltaire was destructive rather than constructive. It attacked the established order, the Church, the monarchic state, with irony

and keen analysis. It taught disrespect and undermined the foundation of the old order. Voltaire possessed a marvellously fertile and active mind. He wrote in every form of literature. His intellectual leadership for several generations was unquestioned in France, and his 10,000 published letters testify to his influence throughout Europe. He was in frequent difficulties in France, and was obliged to live in Switzerland; France was far behind England in establishing freedom of speech. His literary rank is below his importance as a contemporary influence.

Rousseau urged not more reason, but more instinct and emotion. He blamed the current evils upon civilization and called for a return to natural man. "The Social Contract" had a direct influence upon the revolutionary spirit, for it asserted the sovereignty of the people, and declared that their will alone legitimized a government. For all the absurd excesses of his praise of savage man he was a great and original genius. He is a good example of that swinging of the pendulum from one extreme to another which is one of the undoubted phenomena alike of individual action and social movements; his extravagant faith in primitive human nature was a profound and understandable reaction from the artificialities of French society. The whole romantic movement can be viewed as a reaction from the neo-classicism of the eighteenth century. It sought the free play of imagination at the expense of form. It was at the time far more realistic than the false classicism which it superseded.

It can be seen that the points of view of Voltaire and Rousseau had little in common save their individualism and their enemy—the established faith and order. They represent, in fact, two forces in modern minds that have often

FRANÇOIS MARIE AROUET DE VOLTAIRE.

CHARLES DE SECONDAT, BARON DE MONTESQUIEU.

clashed and that are still unreconciled. Voltaire believed in God—he was far from an extremist in his own faith—but he was plainly the ancestor of all the modern rationalistic attacks upon religion, of that warfare between science and religion of which the late nineteenth century heard much. He was no scientist, and the rationalistic point of view must be sharply distinguished from the scientific. It might fairly be described as an effort to apply the scientific method to re-

ligion and other matters with which science proper has not yet attempted to deal. Faith in emotion, in instinct, which was the heart of Rousseau's doctrine, inspired much of the great literature and the newly developed art of music of the late eighteenth and nineteenth centuries. The faith in revolution rested upon a similar philosophy. Rationalism and romanticism can be thought of as tendencies of the mind which have struggled for the mastery of modern man.

Two other French prerevolutionary writers remain to be mentioned, Diderot and Montesquieu. The former was the able leader of a group known as the encyclopædists, who edited a new encyclopædia which gave wide circulation to the discoveries of science and to the new ideas of progress. Montesquieu's "Esprit des Lois" was a study of governments, largely devoted to praising the British form which it somewhat misconceived; it had an important effect upon American and French constitutional thought.

A wide-spread intellectual ferment in other lands aided the development of democratic theory. The tempestuous Paine (1737–1809), an Englishman by birth, was a persuasive advocate of revolution while in America, and in "The Rights of Man" gave strong support to the French Revolution. The early and basic contribution of the philosopher Locke has already been mentioned. A century later in date came the political works of the German philosopher Kant (1724–1804), who lent the full support of his powerful pen to the cause of republicanism. This great thinker began his

career in the study of physical science and applied to philosophy the searching rationalism of this early training. His "critical philosophy" closed a chapter in the history of speculative thought and opened the modern period. It is an ironic

A LANDSCAPE, BY COROT.
A painting of the Barbizon School, in the Louvre, Paris.

commentary on the difficulties of applying logic to life that he wrote "Toward Perpetual Peace," picturing a world-federation of free republics, on the eve of the Napoleonic despotism.

The rise of romanticism in the eighteenth century initiated the outstanding artistic movement of modern times. For a century it dominated the literatures, the visual art, and the music of all Europe. While definitions are difficult, cer-

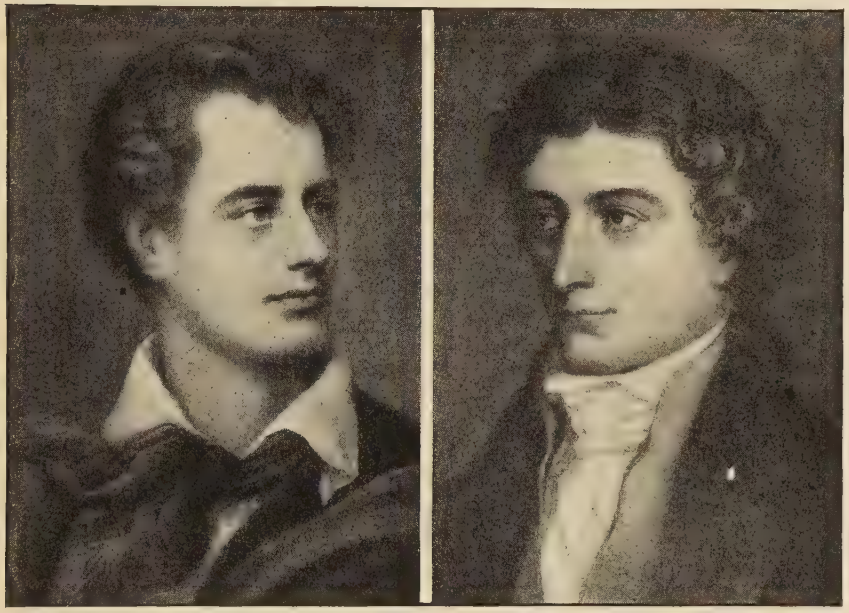
tain tendencies of the romantic writers were universal. They turned from classic example and the intellect to find inspiration in natural scenery and in the primitive emotions of man. They trusted imagination as against tradition, and before the

BRINGING HOME THE NEW-BORN CALF, BY MILLET.
A painting of the Barbizon School in the Art Institute, Chicago.

mysteries of the universe preferred a mystical wonder to scepticism. They revived an interest in early national writings like the English ballads. Their favorite mediums of expression were lyrical poetry and the novel. The latter, indeed, was the creation of these centuries. The schools of landscape-painting showed the same broad tendency in the pioneer work

of the Englishman, Constable, and of the Barbizon school in France.

In England the movement reached its first great climax in the lyrical outburst of the late eighteenth and early nine-



GEORGE GORDON, LORD BYRON. JOHN KEATS.

teenth centuries, in the work of Wordsworth (1770–1850), Coleridge, Byron, Shelley, Keats (1795–1821). These five diverse geniuses typify the breadth of the English gift for the art of writing. The best of Wordsworth ranks with the greatest in any tongue, making the common uncommon. Coleridge sought to make the uncommon credible, as in the magic stanzas of "The Ancient Mariner." Byron aimed lower and flew farther in popular admiration, expressing in

his own life the passion and storms of romanticism. Shelley dwelt amid the stars, a dreamer and martyr, one of the greatest of lyric poets. Yet in sheer physical perfection of the written line, Keats, dying at twenty-six, was master of them all.

PERCY BYSSHE SHELLEY.

SAMUEL TAYLOR COLERIDGE.

The novel, after passing through the historical romanticism of Scott (1771–1832), and the effortless realism of Jane Austen (1775–1817), culminated in the great Victorians, Dickens (1812–1870) and Thackeray (1811–1863), and was carried through the nineteenth and into the twentieth century by such contrasting figures as Meredith (1828–1909), Hardy (1840–1928), and Conrad (1857–1924). There have been few more varied flowerings of any form of

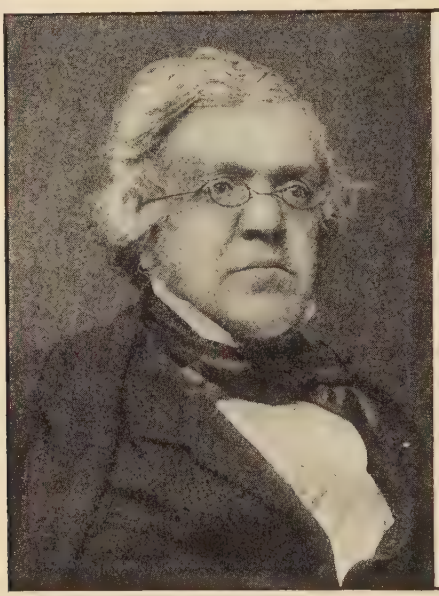
art than that of the British novel. Dickens used the novel to reform the law courts, to stir the laughter and pluck the heart-strings of a wide public. Thackeray made a more intellectual and aristocratic appeal. The three Brontë sisters

CHARLES DICKENS.

JANE AUSTEN.
From a painting by Linnell.

and George Eliot, Charles Reade, and Anthony Trollope, helped paint the most complete portrait of an age that has ever been attempted. The Victorian era was absurdly depreciated in the early twentieth century. It is coming into its own once more. Probably its novels will be its most enduring claim to immortality, since they achieved so complete an expression of the English mind. But the essayists, historians, and poets of the period rank high. Lamb and De Quincey, Macaulay and Carlyle, Ruskin, Morris, Arnold, Newman,

Huxley, Pater—here was surely a century that could hold its own in prose. Where the great Victorian poets, Tennyson, Browning, Arnold, Meredith, Morris, Swinburne, the Rossettis, and their successors, Thompson, Henley, Steven-



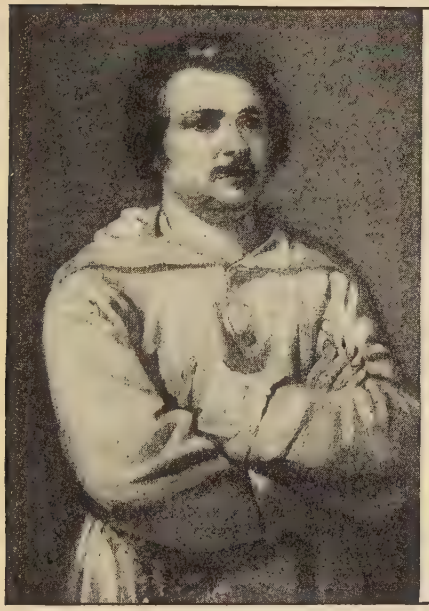
WILLIAM MAKEPEACE THACKERAY.

GEORGE MEREDITH.

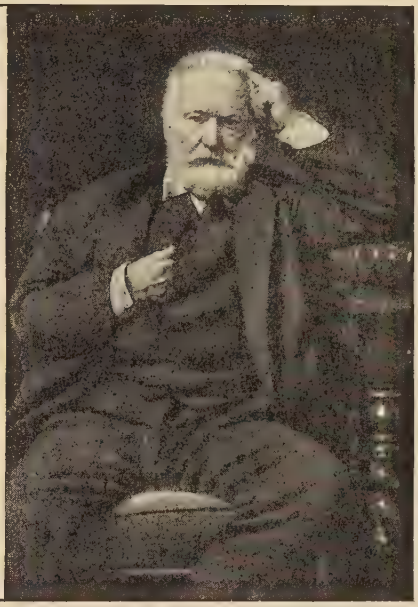
son, Kipling, and now our contemporaries, Housman, Meynell, Flecker, Masefield, and de la Mare, are to be ranked, time must decide. But the old genius of the English mind for the written word has surely not been lost in the new devotion to science and salvation through democracy.

In France the pioneer, Rousseau, was followed by a wide variety of writers, all overshadowed by the titanic figure of Victor Hugo (1802–1885), who, despite his colossal output of dramas and novels, seems most likely to survive in his

lyrics. The rise of the novel culminated in the "Comédie Humaine" of Balzac (1799–1850), a wide shelf of novels, representing a genius of the first rank, as faithful to the facts as the work of any modern realist. Between such roman-



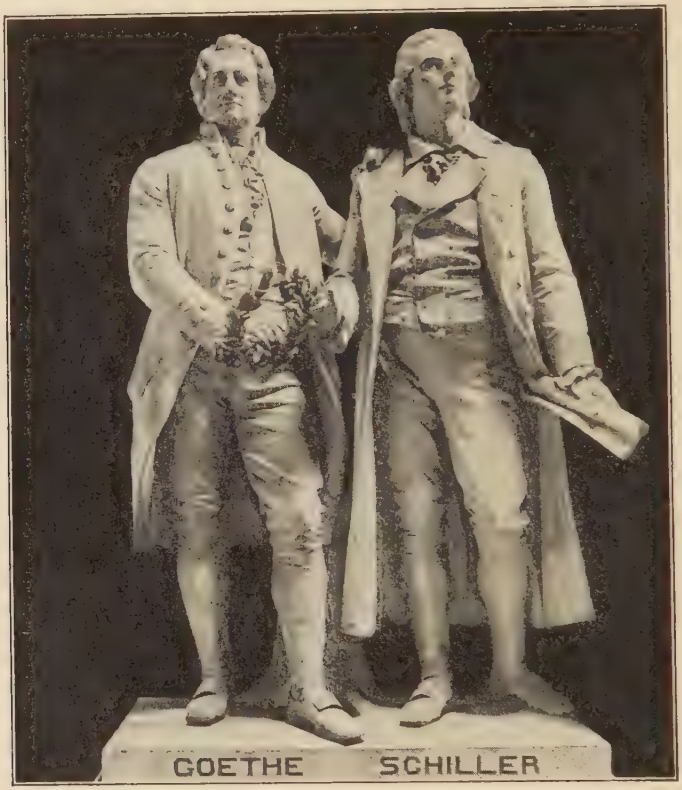
HONORE DE BALZAC.
From the painting by Boulanger.



VICTOR HUGO.
From the painting by Bonnat.

ticism and the most meticulous realism only a problem in technic can draw a boundary line. The novels of Dumas and George Sand followed older models. It was in the criticism of Sainte-Beuve and Taine that the French mind glowed its brightest. Yet if to the lyrics of Hugo are added those of Lamartine, Alfred de Musset, and Gautier there is rare achievement and vitality.

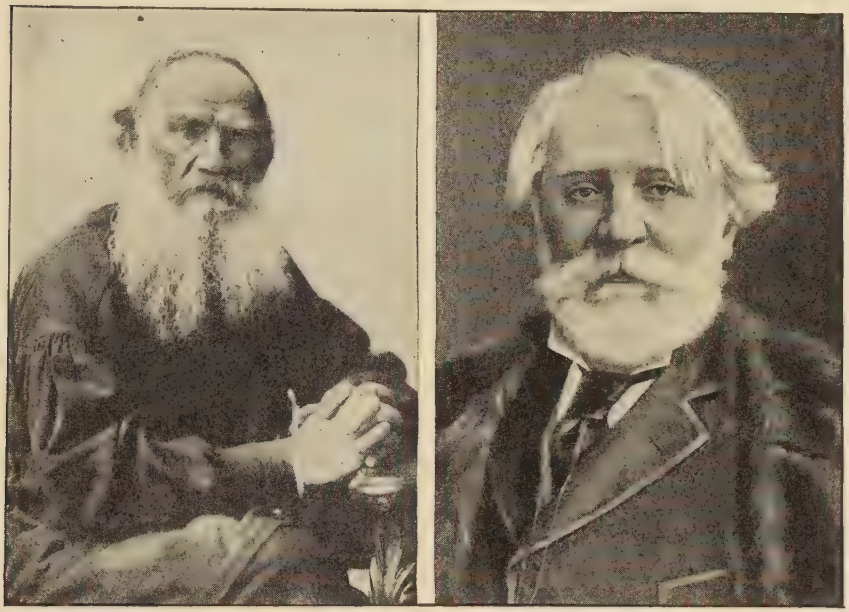
In Germany the master works of Goethe (1749–1832) and Schiller (1759–1805) took part of their inspiration from the romantic revolt, though both are commonly rated



GOETHE AND SCHILLER.
From the statue at their birthplace, Weimar.

classicists. No writer in any country more fully expressed the modern spirit than did Goethe. The first great German writer, he addressed all men as have only the supreme figures of literature. The romantic movement surged about him and he felt not less the tides of science. His life labor,

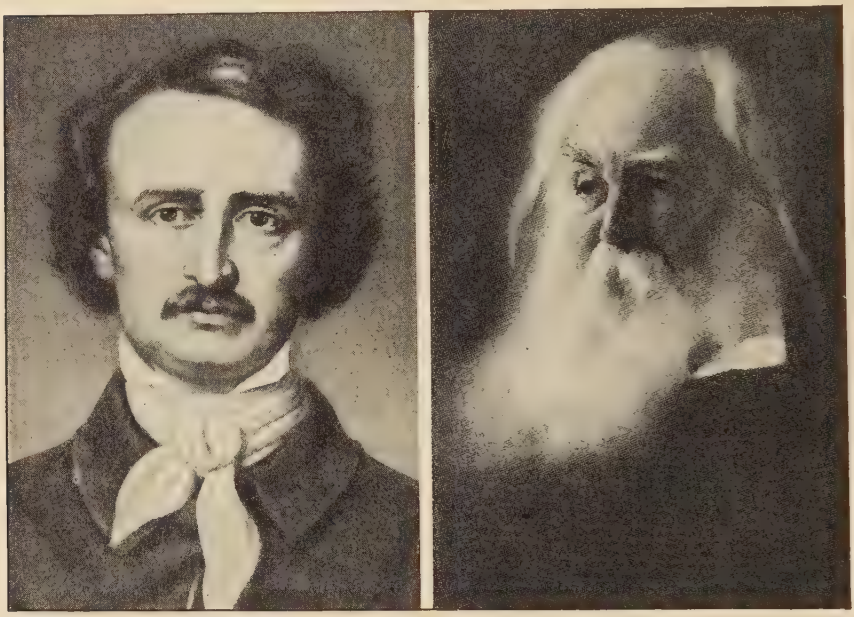
"Faust," summed up an individual philosophy, as did Dante's "Divine Comedy" or Milton's "Paradise Lost." With this great drama are to be ranked his many lyrics, passionate and wise. Schiller showed more clearly the extravagance of emo-



COUNT LEO TOLSTOI. IVAN TURGENIEFF.

tion which was the weakness of the romantic period. Of the men who expressed the extreme thrust of romanticism in Germany, the pessimist and philosopher, Schopenhauer (1788–1860), and the dreamer and singer, Heine (1799–1856), stand out. Nietzsche (1844–1900), the philosopher in revolt against his age, advocate of the "superman" and the "will to power," stands between the romantics and the moderns.

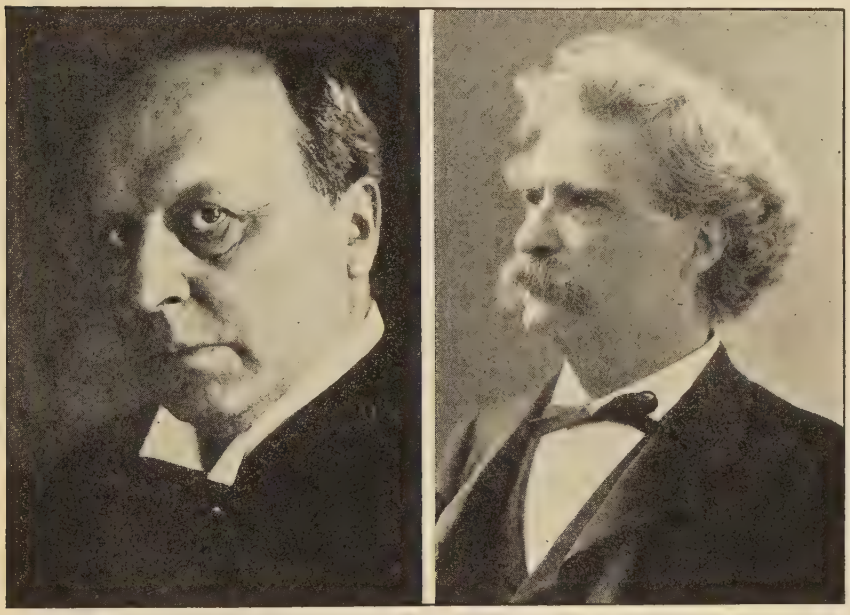
In Russia the outstanding figures were the great novelists Turgenieff (1818–1883), Dostoyevsky (1822–1881), and Tolstoy (1828–1910), surpassed by the novelists of no other country.



EDGAR ALLAN POE. WALT WHITMAN.

The mental growth of America has paralleled much in Europe. Yet her greatest contributions to literature have been extraordinarily individual and original. Poe (1809–1849), the craftsman, Whitman (1819–1892), the uncouth, Mark Twain (1835–1910), the elemental, and James (1843–1916), the complex, are as unrelated to one another as they are to any schools of European thought. It would be interesting and useful if one could determine just how the wider

stream of American literature, bearing such names as Irving, Cooper and Hawthorne, Emerson, Thoreau, Longfellow, Whittier, Lowell, Bryant and Parkman, should be rated in comparison with contemporary achievements in other coun-



HENRY JAMES. MARK TWAIN.

tries. But such comparisons between nations are difficult and unsatisfactory. Americans perhaps overestimated their writers for a time and then probably underestimated them. A fairer balance seems now in course of being struck as the nation reaches maturity and self-consciousness fades. Considerations of national sympathy and pride play a constant part in the formation of literary as of historical judgments.

The romantic movement was definitely related to the rev-

olutionary spirit of the times and to the intensification of nationalism. Wordsworth applauded the French Revolution, Shelley revolted against the established order, Byron hymned the Greek revolt, and the German romanticists did much to unite the German peoples around their national heroes.

Enriching and inspiring the whole romantic movement, and in a sense its most perfect expression, by reason of an incomparable ability to utter emotions, came the development of modern music. It was led by the majestic pioneer, Beethoven (1770–1827), and continued in the nineteenth century by three other great German musicians: Wagner (1813–1883), Liszt (1811–1886), and Brahms (1833–1897). The primacy of Germany in music was accentuated by the development of German lieder, an obvious parallel to English lyricism, and not less noteworthy. Schubert (1797–1828), Schumann, and Franz are merely the first names in a long line of great German lyricists in the field of music.

Romanticism was a broad tendency, confined to no one school, and impossible of accurate definition. It was a reaction from a false classicism and, polemics forgotten, involved no rejection of the essentials of true classicism, of order, structure, style. The two bedevilled words, romanticism and classicism, are typical of the confusion which surrounds most historical conceptions that have been the subject of fierce controversy.

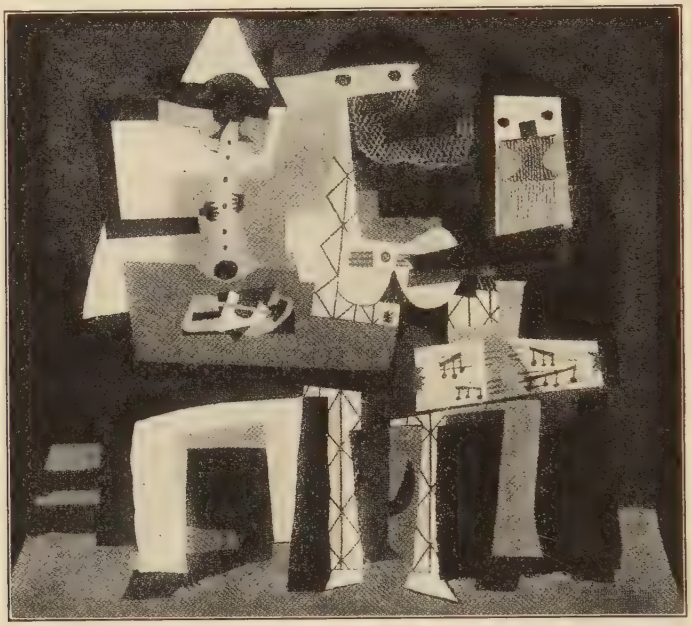
The movement brought its conscious reaction in the realists of the latter half of the nineteenth century, of whom the

French novelist Beyle, who wrote under the name Stendhal (1783–1842), was the forerunner, and Flaubert (1821–1880) the pioneer. The revolt was largely centred about problems of technic, of inventing new methods of using

LE JARDIN À GIVERNY, BY CLAUDE MONET.
Monet was one of the chief exponents of the Impressionist School.

words and lines and colors to convey ideas. The movement has extended to every nation and entered every art. Such names as de Maupassant, Zola, and Huysmans in France, Hauptmann and Sudermann in Germany, Chekov, Gorky, and Andreyev in Russia, and, ranking them all, Ibsen, the great Norwegian dramatist, suggest the breadth of modern realism in literature and the unsoundness of attempting to

contrast it with anything but the excesses of romanticism. Modern poetry has been greatly influenced by French leadership. After the romanticists came as a reaction the classical Parnassians, who pursued the ideal expressed in the



LES TROIS MASQUES, BY PICASSO.
Picasso is one of the leaders of the Cubist movement.

phrase "art for art's sake." Baudelaire and Verlaine, poets of despair like the Englishman Wilde, had their day. The modern experiment in *vers libre* originated with the French symbolists and their successors. In painting, the Impressionists of the last decades of the nineteenth century sought methods for reproducing sunlight on canvas. The Cubists of the present century and their successors endeavored to de-

velop a new kind of picture in which the essentials of form might be conveyed direct to the eye without imitation of reality. Similarly, certain writers of the present era have tried to present thoughts, especially the vague stream of the individual's unspoken thought, by various types of speech. Modern music has likewise broken away from the old conventions of harmony and tonality. It is too soon to say whether this reaction from the great tide of romanticism holds any real achievement or is simply the eddying of weakening currents or whether, indeed, it is a reaction at all and not merely the new direction of an old current. Especially since the World War has confusion been the most conspicuous characteristic of all artistic endeavor.

The Americas

The American Revolution was fought and the new Constitution adopted (1788) before the French Revolution began. The ideas of Voltaire, Rousseau, Diderot, Montesquieu, and, even more, Thomas Paine played their part in the American scene; and the example of the revolt undoubtedly reacted upon France. The same double set of causes, spiritual and material, were present in America, and the same debate exists as to which were the more important. The colonies wanted more independence, and the government of George III was stupid and tactless. The ideals of liberty and equality expressed in the Declaration of Independence represented a genuine emotion on the part of many of the colonists. There

were, on the other hand, solid, economic reasons for revolt against taxation and other restraints. An open mind would concede force to both causes and refuse to attempt, in view of the present ignorance of human motives and mental processes, to say which was the more important.

The American Revolution raises another perennial problem. The colonists were extraordinarily fortunate in having as a leader one of the noblest characters of history—George Washington (1732–1799)—and it is a fair speculation whether the revolt would have succeeded without his indomitable courage and purity of motive. No one will ever know, for it is impossible to run the events over again without him. One other American deserves to be mentioned from this period—Benjamin Franklin—whose scientific work has already been set down. Franklin represented the colonies in Paris with great success, and since French arms and a French fleet made the final success at Yorktown possible, the importance of his work abroad is obvious. Simple, practical, wise, Franklin was a large part of early America, and Paris did well to honor him. The figures of both Franklin and Washington helped to carry the spirit of the American Revolution abroad. Another bond was Lafayette, who fought with the American forces as a youthful idealist and formed a lifelong friendship with Washington. Personalities loomed large in the whole revolutionary effort in America, which hung in the balance time and again and might well have ended in failure.

THE SIGNING OF THE DECLARATION OF INDEPENDENCE.

From a painting by Arthur E. Becher.

The restricted scope of the American Revolution should be kept in mind. Despite the vague phrases about liberty and equality in the Declaration of Independence, there was little radicalism in the colonies, and no thought of a democracy based on manhood suffrage. Religious freedom had, indeed, been achieved in the colonies and the separation of church and state was one new landmark of liberty which the new nation set up. But the revolution was primarily a political one to throw off the British sovereignty, and the government set up was a republic carefully safeguarded against radical change by a written constitution and a system of checks and balances among the executive, legislative, and judicial branches. The whole was modelled after the British and colonial governments, with a President substituted for the king, but omitting the chief figure of the British government, the prime minister, because his functions were newly developed and not clearly understood. Thus, unlike the governments of Europe, the United States has not a responsible cabinet system. Its executive is elected for a fixed term, and he may or may not have a majority of Congress behind him. Here was a factor strongly making for conservatism. Only the propertied classes voted as in England. Not even Thomas Jefferson advocated manhood suffrage, and the noble phrases of the Declaration of Independence expressed a general aspiration rather than a plan of reform. The chief contribution of the American Constitution to the science of government was its ingenious use of the federal principle. Here were also

its strength and its weakness—its strength in that the federal system made practicable the union of scattered and diverse colonies; its weakness in that the division of sovereignty made possible the Civil War. An incidental and, to some extent, accidental item of originality was the supremacy of the Supreme Court over the legislature, not clearly written in the Constitution but established at an early date largely through the brilliant governmental genius of Chief Justice Marshall.

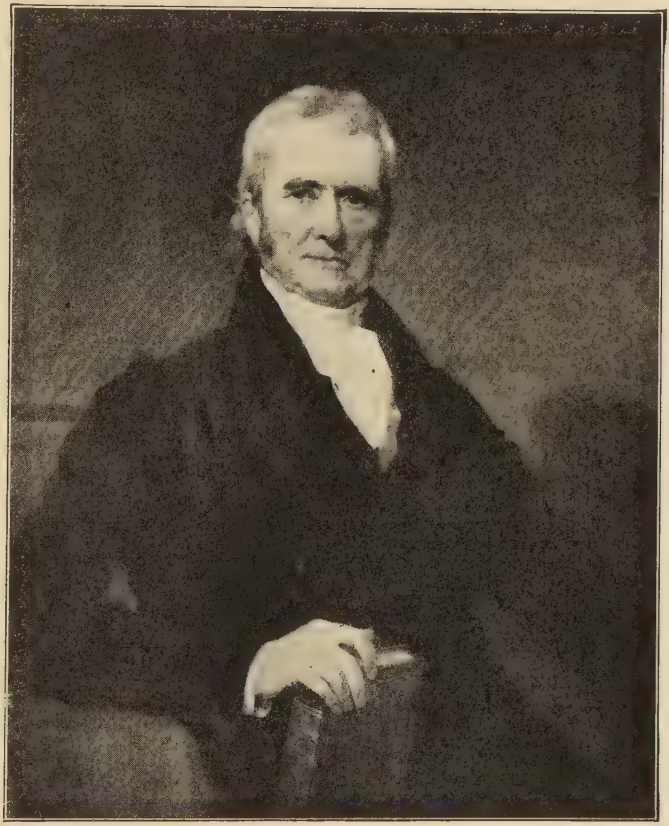
The force of the democratic movement reached the question of the ballot in the '20s and manhood suffrage became practically universal by 1850. In the broader aspects of democracy, the figure of Abraham Lincoln (1809–1865) achieved a lasting and far-reaching influence. He was a frontiersman, born and reared in poverty, and typified all that the pioneer life held of simplicity and friendliness. By his fineness of spirit and firmness of leadership—which held the nation together despite the deep cleavage from the problem of slavery—Lincoln became a national hero ranking with Washington in the country's regard. He became not less, a world symbol of democracy, of the potential worth of the common man.

Thus while the United States started life with certain governmental features unlike anything in Europe, it was an integral part of the Western World and derived its institutions and traditions primarily from England. That it has gradually diverged from Europe, developed an American type, American policies, and American institutions, which

GEORGE WASHINGTON.

From the painting by Gilbert Stuart.

set it apart from Europe, is due to various causes. The basic reason is the Atlantic Ocean, which, despite the utmost that science has done, still holds the two continents days apart.



CHIEF JUSTICE MARSHALL.
From a painting by Henry Inman.

Just as England, an island nation, has always remained somewhat aloof from the European scene, so America, behind an ocean, has grown to manhood amid a high degree of independence. Another geographic reason has largely deter-

mined the direction of this independent path, the fact that the nation has been obliged to develop a virgin continent and, generation after generation, has gone west. The pioneer ex-

From a photograph © Harris & Ewing.

THE LINCOLN MEMORIAL AT WASHINGTON, D. C.

Designed by Henry Bacon and erected in 1919 in honor of Abraham Lincoln.

perience has moulded the national character and is still to be felt in the land, though the last frontiers are failing. Democracy in the widest application, in the human relationships of society and business, is one of the fruits of the pioneer spirit.

So, in all probability, are such traits as adaptability, friendliness, simplicity of manners, and a taste for quick shooting. The origins of the two conspicuous trends of American character, an intense materialism and an intense idealism, are perhaps to be sought in the same national experience, though how two such contrary aims can proceed from the same source forms one more mysterious problem of heredity and environment. One other physical fact must also be borne in mind, the new mingling of European types which has kept the American stock predominantly English, yet in every period crossed with other breeds, with French, German, Irish, Scandinavian, Italian, Slav, and Jew. The result is a mingling of racial strains unique in the western world upon any such scale. In that the three main racial types of European recognized by many anthropologists, Nordic, Alpine, and Mediterranean, are present, the racial origins of France are suggested; yet since the northern overwhelmingly predominates, no close parallel exists and, environment aside, a new national type might be expected to develop. But the racial strains of Europe are so little understood and the whole science of anthropology is so immature that these superficial facts of the American fusion must be read with every reserve.

What is unmistakable is that continental United States contains in addition to its European and white elements two wholly alien stocks, the American Indian and the African Negro. The former was a serious obstacle to early colonization but has since been overwhelmed by the white man and

the only problem he raises to-day is how to protect a small and weakened minority, along with its interesting primitive institutions, from political ignorance and greed. The Negro, on the other hand, has not been overwhelmed and constitutes to-day roughly one-tenth of the nation. No European nation has had to face so serious a racial problem within its national borders. The issue of Negro slavery caused the Civil War (1861–1865), which placed the whole national structure in peril; and the abolition of slavery, which resulted, solved none of the fundamentals of the problem, either socially, industrially, or politically. The Negro problem has seriously obstructed the normal growth of political parties. Racial antagonism still withholds political equality from the Negro in the Southern States where he is numerically powerful; in the North, his industrial and social handicaps remain heavy. The presence of this large, unassimilable element probably constitutes the most serious problem that the nation has to confront. No possibility of fusion, such as has taken place in certain Central American countries, appears to exist. Having this one grave racial problem on its hands, America has quite sensibly halted Oriental immigration to avoid another.

Barring the one calamitous break of the Civil War the nineteenth century constituted a period of swift continental extension and development. The earlier decades were largely devoted to pushing the frontier westward and to building canals and railroads. With the annexation of California in

THE OPENING OF THE PRAIRIES.

From a painting by N. C. Wyeth.

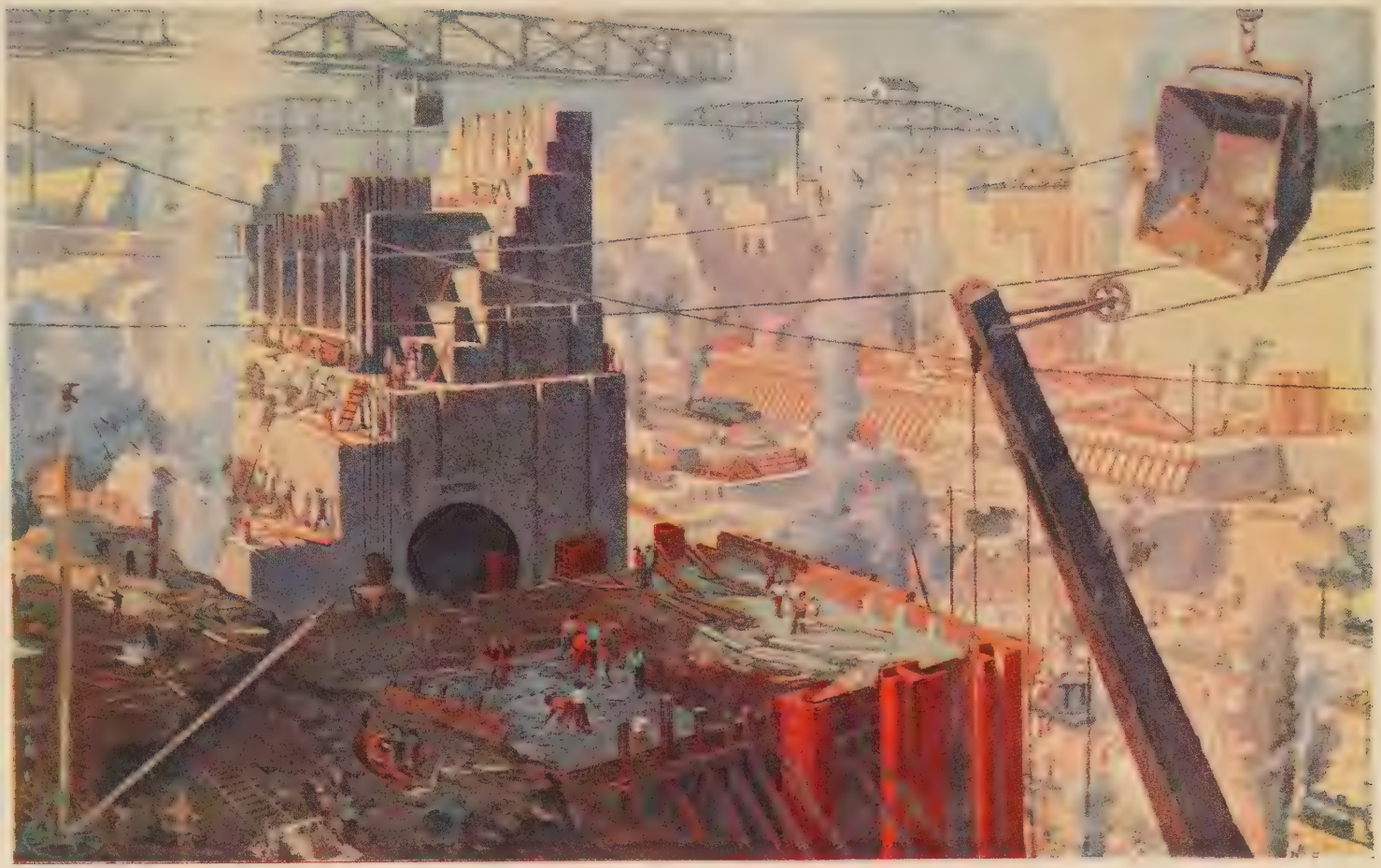
1848, the nation ran from ocean to ocean and the industrial revolution, as the result of a system of protective tariff, began to make swift headway. The result is the extraordinary era of mass production in which Americans now live. From being a nation almost wholly agricultural, the United States approaches the day when its entire food supply will be consumed at home, thanks to its vast and prosperous industrial population.

In its relations with the rest of the world, the nation early developed that independence of view-point which has controlled its policies to this day. Washington uttered a memorable warning against foreign alliances. The unsuccessful War of 1812 was a gesture of resentment at foreign interference with American shipping. In the Monroe Doctrine (1823), one of the major national policies of the world, the new nation declared its purpose, on the one hand, not to interfere in European affairs which did not concern the safety or interests of America, and, on the other hand, not to permit either new colonization in the Americas or the extension of the monarchical system to the newly established republics or any other interference with their independence. As a result Russian designs to extend Alaska southward and proposals by the Holy Alliance to aid Spain in recovering her American colonies were blocked. The Monroe Doctrine was a large gesture for a small and newly formed power. But it has been upheld, applied, and extended by subsequent administrations, soundly against Napoleon III and Maximilian (1863–1867),

blunderingly against England in the Venezuelan dispute (1895), and with widened scope against England and Germany when those nations sought to collect their debts from Venezuela by blockade and occupation (1902). This last episode broadened the original doctrine so as to prevent even an intervention for financial purposes by a European power; as a logical consequence the United States has been forced to act as a collecting agent in a number of cases. The effects of the World War upon the Monroe Doctrine have been much debated. Had the United States entered the League of Nations there would have been a clear modification of the policy even though it was expressly referred to in the League Covenant. The refusal of the nation to sign the covenant may fairly be taken as a decision to adhere to the historical American policy.

With the turn of the century, the United States rounded out its period of internal development and embarked upon its second great period of overseas expansion. The war with Spain (1898) resulted in carrying the American flag across the Pacific to the Philippine Islands and converting the nation into a great colonial power. The realization that the nation faced west as well as east led to the construction (1904–1914) of the Panama Canal through the vigorous if high-handed initiative of President Roosevelt.

The United States did not enter the World War until forced thereto by the unrestricted submarine campaign of Germany against American ships and nationals and the discovery that Germany was seeking to form an alliance with



THE BUILDING OF THE PANAMA CANAL—1912.

The Miraflores Locks are represented here in process of construction. Sections of both the centre and side walls are shown, as well as the great culverts to carry the water, and the cranes used for handling the concrete.

From a painting by W. B. Van Ingen.

A SCENE FROM THE SPANISH-AMERICAN WAR.

A skirmish near Santiago.

From a painting by Howard Chandler Christy.

Mexico by promising that nation the restoration of her former territory in New Mexico, Texas, and Arizona. The declared purposes of the nation, however, recognized the war as a struggle between democracy and autocracy and the prevailing sentiment of the nation had been strongly with the Allies from the start. Arriving at the climax of the struggle, American forces proved a decisive factor in preventing a stalemate and winning a military decision against the Central Powers. The leadership of President Wilson during the war and at the peace conference, which he personally attended at Versailles, has been the subject of bitter disagreement and it would be impossible to present any agreed or impartial estimate of his policies. In forming a personal judgment as a basis for present action, one must be careful to recognize its tentative character and stand ready to revise it as facts replace surmises and perspective succeeds prejudice.

In the western hemisphere, Canada alone has developed, within the British Empire, a civilization homogeneous with that of the United States. Talk of annexation of Canada by the United States, once frequently heard, has been forgotten in an era of mutual respect and cordial friendship. The rest of the nations to the south, from the Rio Grande to Cape Horn, have followed the American example governmentally, but for racial, linguistic, and commercial reasons have retained closer intellectual bonds with Europe. The American Revolution gave the inspiration for South American hopes of liberty, but it was not until Napoleon invaded Spain in

1810 that a favorable opportunity arrived to strike. Then the struggle began in Venezuela under the leadership of Bolivar (1783–1830), the greatest of South American patriots. He helped free Venezuela (1821) and Peru (1825) and to set up the new nation of Bolivia (1826). Brazil declared her independence of Portugal in 1825 but remained an empire until 1890, when a republican government was established. The struggle for independence in Argentina began in 1810 and was substantially won by 1824, but owing to wars and rebellion stable government was not assured until after the revolution of 1890. The Chilean struggle lasted from 1810 to 1818, and after a dictatorship, a constitutional republic was set up in 1823. In Mexico independence was achieved in 1824, but it was not until the long dictatorship of Diaz (1874–1911) that stability and material prosperity were achieved. In general and with significant exceptions based on racial distinctions, it may be said that the nations lying in the tropical regions of Central and South America have been slow to end revolutions and establish lasting governments save under dictators, whereas the nations to the south lying wholly or partly in the temperate zone have shown more capacity for self rule. Argentina, Brazil, and Chile, for example, commonly known as the A B C powers, have become powerful and stable states.

France

The French Revolution began in 1789 and lasted ten years, till Napoleon seized the reins and ended the rule of the

people in a dictatorship. It began in orderly fashion, with no thought of overturning the monarchy. The Estates General, composed of the clergy, nobility, and the third estate, were called by the king to meet at Versailles in May to consider the desperate problems of taxation which confronted the nation. The first dispute ended in a complete victory for the third estate, which by sheer boldness organized itself into the first National Assembly of France. The weak, hesitating Louis XVI first opposed and then surrendered to the third estate's insistence that it sit until a constitution be prepared.

In July the first disorder broke out at Paris, where the Bastille was captured and razed on the 14th. The spirit of revolt spread to the provinces, and a number of châteaux were burned by the peasants to destroy the records of feudal dues. As a result the Assembly at Versailles speeded up the labors, and the remaking of France was accomplished in the month of August. Here was no mere shift of political sovereignty, as in the American Revolution. Serfdom was abolished, taxation was reformed so as to bear upon all alike, the Church tithes were abolished, and the old provinces were replaced by departments, ending the old feudal diversity for all time. The Declaration of the Rights of Man wrote into the law of the land the ideals of equality and liberty which Rousseau had preached. The sovereignty of the people was asserted, and freedom of speech and religious liberty were established.

Once again Louis XVI hesitated. As a result, a Paris mob,

composed chiefly of women, marched to Versailles to ask for bread, and brought him and his family back to Paris with them. Thereafter he was virtually a prisoner in the Tuileries. But still there was no thought of deposing him. The Na-

THE MOB OF WOMEN ON THEIR WAY TO VERSAILLES TO ASK FOR BREAD.

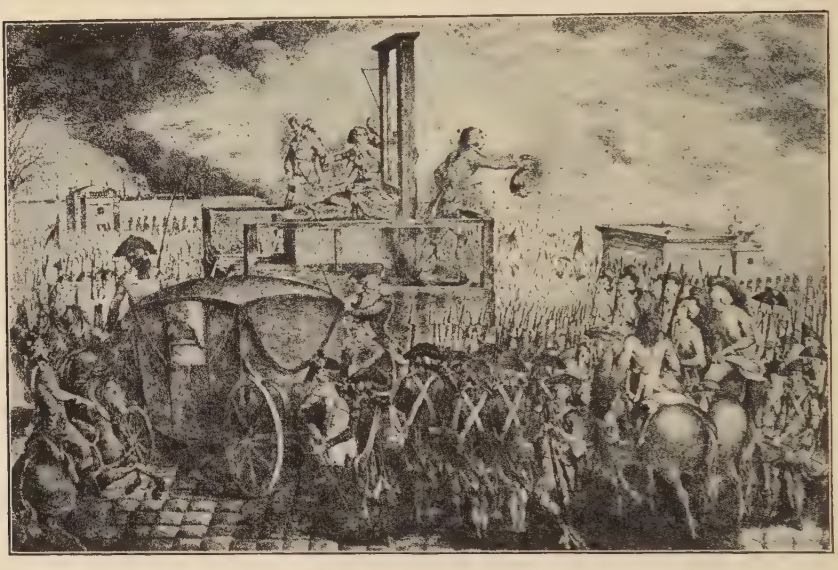
From an anonymous water-color in the Bibliothèque Nationale, Paris.

tional Assembly also moved to Paris, and in the more radical atmosphere of the city blundered into its first excesses. It passed laws altering the organization of the Church and seizing its property. At the end of the first year the nobility were abolished. Thereafter the émigrés over the border conspired to start a counter-revolution which would restore the old order. Even so, the second year ended with the populace still loyal to the king. The turning-point came in June, 1791, when the king and queen committed the unpardonable blun-

der of attempting to escape from France. By chance they were halted near the border and brought back ingloriously to Paris. This final act of the dull Louis XVI sealed his doom. Republican sentiment now began for the first time to develop after two years of revolution. During this early period the moderates had been in control of the Assembly under the leadership of Mirabeau, an aristocrat, a moderate, and one of the ablest Parliamentary leaders of France.

The third year saw a swift turn toward the extremists. Most potent in stirring radical sentiment was the war commenced by the monarchical powers of Europe to rescue Louis XVI and his queen, Marie Antoinette, sister of the emperor of Austria. As a consequence all Paris was stirred by fear and wrath. The Jacobin clubs gained control of the Assembly, mobs invaded the Tuileries, and in September, 1792, the Paris Commune, the radical city government, which had usurped the powers of the Assembly, committed one of the most dastardly crimes in history. It massacred in prisons several thousands of alleged sympathizers of the Austrians and the émigrés. In the same month the monarchy was abolished by a Constitutional Convention and a republic proclaimed. In the spirit of fantastic radicalism which now seized upon Paris, a new republican calendar was created. The king was convicted of treason—he had unquestionably treated with other rulers who wished to invade France—and executed in January, 1793. There succeeded the terrible year of the Terror, from April, 1793, to July, 1794, the fifth year of

the Revolution. If the early years of the Revolution were based on the doctrines of the rationalists, of Voltaire, of Diderot, and Montesquieu, it was the emotionalism preached by Rousseau which now engulfed Paris. A Committee of



THE EXECUTION OF LOUIS XVI.
From an anonymous engraving in the Musée Carnavalet.

Public Safety was formed whose primary duty was to save France from the invading armies. It accomplished this end in an extraordinarily successful military campaign, thanks largely to Carnot. Meantime the Terror was turned against alleged enemies at home. Revolt against the radical rule at Paris flared in the provinces, and as a result the Committee of Public Safety was forced to fight a civil war at home while defending the frontiers against foreigners. Thousands were

THE CORONATION OF NAPOLEON, DECEMBER 2, 1804.

Napoleon seized the crown from Pius VII and placed it on his head with his own hands, thus signifying his independence of papal authority. He then crowned Josephine empress. The ceremony was witnessed by the emperor's mother and three brothers, together with various members of his court.

executed by the guillotine in Paris and many more in the provinces. Marie Antoinette was put to death in October, 1793. The climax of the reign of Terror came in June and July, 1794. In the reaction, the fanatical Robespierre, leader of the Terror, was himself guillotined, and the slaughter was over.

The Revolution passed through five more years of relative quiet, disturbed by occasional uprisings and violence. The lesson of representative rule was hard to learn. Finally in November, 1799, Napoleon Bonaparte (1769–1821), a young general of Italian ancestry, a Corsican by birth and a Frenchman by the chance of Corsica's annexation a year before his birth, returned from campaigns in Egypt and Syria, executed a military coup d'état, threw out the legislators at the point of the bayonet, and established himself as the virtual sovereign of France under the form of a consulate. There can be no question that the arrival of Bonaparte was generally welcomed as a deliverance from the blunders of the new democratic rule.

From 1799, for fifteen years, Napoleon was the despot of France, a threat to all Europe, and the remoulder of much of it. No other military or political leader, not even Alexander the Great, ever bestrode his time so completely. He is the complete expression of the great man theory of history. As such he has been belittled and derided by the believers in economic causes and hymned to the skies by the hero-worshippers. It is difficult to hold the scales even before such a

superman. One point of discrimination seems clear, and that is the turn in his career that became unmistakable midway in his despotism, around the year 1807. From the start his colossal egotism spurred him from one conquest to another. But his dreams of power became more grandiose with the passage of the years, less realizable, more obviously doomed to end in disaster. His military genius, once swift, flexible, and sure, began to overreach itself, to attempt the impossible and apply old formulas to changed conditions. Even his physical appearance changed; from a lean officer, born to command, he became a pompous potentate, seeking to impress. It is easy to admire the vast energy, the complete originality, and the real services of the young Napoleon, become at thirty the master of his country. It is impossible not to be disgusted by the overweening ambitions of the emperor in his last years of arrogance and tyranny. In the beginning he reorganized France, in the rôle of a ruthless but benevolent dictator, and it may fairly be said that this one-man rule put into effect many of the ideals of the Revolution which an inexperienced and incompetent democracy had fumbled. The sequel can be regarded as a peril which besets any despot, destroying his sense of proportion, threatening even his reason.

The chief achievements of Napoleon at home included the restoration of peace with Rome by the Concordat of 1801, the rehabilitation of public finance, the drafting of the Code Napoléon, ending the confusion of the old provincial laws and setting a model widely followed in the Latin

NAPOLEON AT THE BATTLE OF RIVOLI, JANUARY 14, 1797.

One of his earliest and most brilliant victories over the Austrians.

From the painting by Philippoteaux, in the Musée de Versailles.

nations, the building of great highways, and the establishment of a national system of education.

Abroad, each successful campaign recast the map of Europe. Already in 1797, in Napoleon's first and perhaps most brilliant campaign, the young general, acting for the Committee of Public Safety, had defeated Austria in northern Italy, and gained for France, by the treaty of peace, Austria, Netherlands, and the central part of northern Italy, which Napoleon organized into the Cisalpine Republic. By another campaign against Austria in 1800, which was decided by the famous battle of Marengo, French boundaries were pushed to the Rhine. At this time the region of the modern German republic was still divided into hundreds of petty states, all under the nominal sovereignty of the Holy Roman Empire. For generations the head of Austria had been elected emperor of the decaying Holy Roman Empire, and it was by this authority that the Austrian emperor turned over the left bank of the Rhine to Napoleon. The effect upon Germany was far-reaching; to compensate the nobles ousted from their territory the patchwork quilt of German organization was completely remade, and a few large kingdoms secured the bulk of the territory. Prussia at last had serious rivals among the German states, and the union of modern Germany in 1870 became possible. Various coalitions had been formed against France during the Revolution, and they were renewed against Napoleon. Brief intervals of peace occurred, but England met the Napoleonic threat with increasing re-

solve. She declared war against France in 1803, and the fight continued to its inevitable end at Waterloo in 1815. Napoleon assembled an army on the Channel coast, and England stood guard against invasion, though whether Napoleon really intended to risk a crossing while English fleets controlled the sea is not known. In 1805 Napoleon defeated the Austrians and Russians at Austerlitz. He had already assumed the title of king of Italy, and he now annexed the remaining Austrian territories in northern Italy. He ousted the king of Naples, and made his brother Joseph king of Naples and Sicily. His brother Louis he created king of Holland. In Germany he organized a number of dependent states. With Prussia, that had heretofore been neutral, he picked a quarrel and fought a swift and successful war. As a result, western Prussia was made the kingdom of Westphalia for the benefit of another brother, Jerome Bonaparte. Thus Napoleon marched about Europe, shifting boundaries, creating new states at will. The peace of Tilsit in 1807 marked the climax of this period of success. Yet one important exception is to be noted. England still ruled the seas. In 1805 Admiral Nelson won the famous sea-battle of Trafalgar off the coast of Spain, and thereby not only confined Napoleon's ambitions to Europe but maintained English arms as a potential threat to Napoleon's career. The vital importance of sea-power was once more strikingly exhibited.

The tide of success began to turn in the so-called Peninsula campaign of 1808 in Spain. By his personal skill he suc-

THE BATTLE OF TRAFALGAR.

From a painting by William C. Stanfield, in the Royal Service Club, London.

ceeded in seating his brother Joseph on the throne of Spain after several serious defeats; but the English army under the duke of Wellington held on, and when Napoleon left, the French forces were slowly driven northward over the Pyrenees. The venture proved a costly failure. The next two years saw more victories for the emperor, notably that of Wagram in 1809 against Austria, which brought more territory to heel. At this moment the empire and dependencies of France included all Europe, save only Portugal, Sardinia, and Sicily in the south, Great Britain, Norway, Denmark, and Sweden to the north, and Russia, Austria, and Turkey to the east. In this hour of widest triumph he divorced his childless wife, Josephine, and married Maria Louisa, the daughter of the Austrian emperor. A son was born to his new wife, but this heir, the pathetic young king of Rome, did not live to reign or to marry. He was regarded as Napoleon II by the loyal Bonapartists after his father's deposition, but when the Napoleonic dynasty returned, fifty years later, it was a collateral heir, the son of Louis, who became emperor as Napoleon III. Imperialistic ambitions ruled Napoleon through these years of his greatest power. He created a new nobility, imprisoned several thousands of opponents, and rigidly censored the press. He exhibited perfectly the degeneration of the benevolent despot into the arrogant and vulgar tyrant.

The end was swift and inevitable. At Tilsit, Napoleon had agreed with the young Czar of Russia to divide Europe between them. Now his inflated dream could accept no ri-

valry, and in 1812 he set out upon his tragic effort to conquer Russia. His army of 400,000 dwindled to 20,000 in the battles and hardships of the campaign; the fearful retreat from Moscow gravely compromised his prestige at home. When he risked battle again in 1813 he met decisive defeat at the hands of the Russians, Prussians, and Austrians at the Battle of the Nations near Leipzig. The great empire collapsed like a house of cards, the allies entered Paris, and Napoleon was forced to abdicate. The rest was epilogue. The famous Hundred Days were rich in drama, of small importance to history. The great emperor escaped from the island of Elba, landed in France in 1815, was greeted with enthusiasm by his old comrades in arms, and led a hastily reunited army against the allies at Waterloo. The British troops under the duke of Wellington stood him off, and when the Prussian forces under Blücher arrived, the French armies were utterly routed. Napoleon was banished to the island of St. Helena off the coast of southeast Africa, never to return.

The political story of France since has comprised violent swings of little permanent significance. The allies restored the Bourbon line to the throne in the mild and moderate person of Louis XVIII, the brother of Louis XVI (reign: 1814–1824). (The son of Louis XVI died mysteriously while a prisoner of the Revolution. Though never crowned, he was regarded by the royalists as Louis XVII.) His brother, Charles X (reign: 1824–1830), attempted a fanatical re-

NAPOLEON III RECEIVING A GROUP OF SIAMESE AMBASSADORS.

From the painting by J. L. Gérôme.

turn to the Ancien Régime and was ousted by a brief revolution—once more barricades of paving-stones blocked the streets of Paris. Louis Philippe, duke of Orleans (reign: 1830–1848), descended from a younger branch of the Bourbons, attempted the rôle of a citizen-king under a constitution that favored the powerful bourgeoisie, or middle class, of France. But radicalism grew apace among the workers as the industrial revolution began to make itself felt in France, and the king turned in a panic to measures of suppression. There resulted the Revoluton of 1848—a year of unrest throughout Europe—with the usual barricades and abdication. The brief-lived Second Republic began under radical control, and the newly organized socialists were soon fighting the conservative republicans. This time the military forces, representing the bourgeoisie, took a terrible revenge, slaughtering 10,000 working men fighting under the red banner of socialism. These "June days" of 1848 killed far more than the Terror of 1794. Out of the mêlée appeared the strange and absurd figure of Napoleon III (reign: 1852–1870), nephew of the great emperor, mediocre, cunning, spurred by ambition to grandiose undertakings beyond his ability to execute, and great only in his devotion to the Napoleonic legend. He had twice before tried to seize the throne, and each attempt had ended in ignominious failure. Now the people turned to him to rescue the nation from civil war and elected him president of the republic; in 1852 he became emperor under the name of Napoleon III. Thus the Napoleonic myth

returned to rule France. These years of tranquillity, of great industrial advance, ended in the disastrous Franco-Prussian War of 1870. The great Prussian chancellor Bismarck tricked the incompetent Napoleon III into a war for which the nation was utterly unprepared. French armies were overwhelmed, and out of a terrible civil war in the streets of Paris, more bloody than the Terror or the "June Days," issued the Third French Republic, with a somewhat vague constitution, providing for a responsible cabinet system, modelled after the British pattern.

Its first years were threatened by monarchist and Bonapartist sentiment, but it gained strength and stability and passed through the ordeal of the World War unshaken. The separation of church and state was accomplished in 1905 after considerable disturbance. France remains a Catholic country, but schools and the government are alike free from clerical control. Radicalism in the industrial centres has been active, as the rise of socialism and of syndicalism, the more extreme doctrine of direct action, has recorded. But it has been counterbalanced by the conservatism of the peasants and the moderation of the bourgeoisie. The British cabinet system has not worked with complete success in France, and the life of governments has been short owing to the absence of a two-party system and the prevalence of a large number of small blocs. A vast bureaucracy has gained influence at the expense of Parliament. Thus, after many tribulations, democracy, based on manhood suffrage and enacting the prin-

THE CAPITULATION OF SEDAN.

Napoleon III surrenders to the Prussians under Bismarck, on September 1, 1870.

From a painting by Anton von Werner.

ciples of civil and religious liberty which were born of the French Revolution, prevailed in France.

England

The growth of democracy in England was in complete contrast with the record in France. England had been a pioneer in protecting certain elemental rights of the citizen (safeguarding his person from arbitrary arrest and guaranteeing him a fair trial before an impartial court), and also in developing an effective Parliament, supreme in the state and not even subject to the king's veto. The monarch reigned, but did not rule, in England at a time when benevolent despots were still supreme on the Continent.

But democracy was still afar. Parliament was controlled by the nobility and large landowners clear down to the Reform Bill of 1832. One of the methods by which this control was perpetuated was by the system of rotten boroughs; that is to say, towns which had decayed and lost all or most of their population sent the same number of representatives as centuries ago. The great new industrial cities of Manchester and Birmingham had no representation. Bribery was rampant. The popular dissatisfaction with this situation forced reform by the threat of revolution but without violence. The Whigs brought in the bill, the Tories opposed it. The House of Lords rejected it after the House of Commons passed it, and the crisis came when the Whigs insisted that the king create enough new peers to pass the bill in the House of Lords.

When the threat of revolution was clear, the king finally consented to act. The Lords then yielded, making the appointment of new peers unnecessary, but establishing for the future the ultimate supremacy of the Commons. This principle was more important than the bill which merely abolished certain rotten boroughs, created some new ones, and extended the suffrage to shopkeepers and the well-to-do. Laborers, both in factory and on the farm, still lacked the ballot.

The campaign for reform was pressed by the Chartists, so called from their charter of reform, the chief items of which were universal suffrage and the secret ballot. The movement grew in intensity, revolutionary acts were advocated, and rioting began on a large scale. Great petitions were presented to Parliament. But the effort for the time being failed. It was in the long and peaceful years of Queen Victoria (reign: 1837–1901), and with the rise of two new parties—the Conservatives, who succeeded the Tories, and the Liberals, who succeeded the Whigs—that the Reform Bills of 1867 and 1884 were passed. Only one man in five had the vote under the Reform Bill of 1832. This was doubled in 1867, and in 1884, under the Liberal leadership of Gladstone, another extension was granted. Manhood suffrage came as a result of the World War.

Thus the conservative forces of England, by yielding gradually, when revolution threatened, saved England from disastrous overturns. It developed to a high degree of effi-

ciency the so-called responsible cabinet system of government wherein the executive head of the state, the prime minister, though appointed by the king, was really the ma-

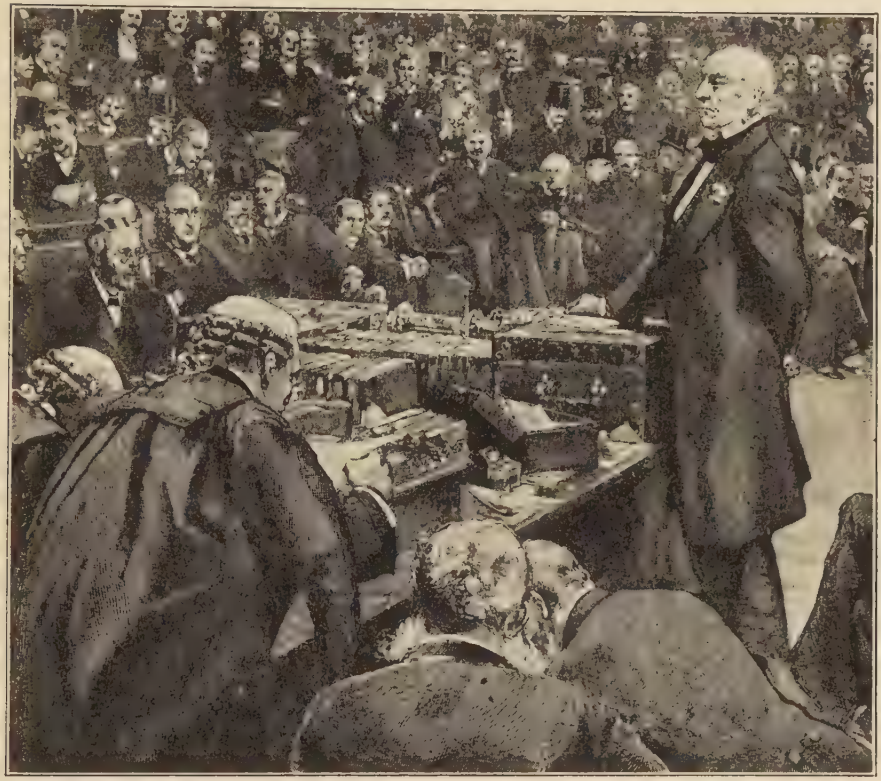
QUEEN VICTORIA WITH TWO OF HER GRANDCHILDREN.

jority leader of the House of Commons, and held office only so long as he commanded a majority therein. With the rise of the Labor Party in recent years, the system has not functioned as well. When more than two parties are strong, democracy tends toward confusion and minority rule.

Commercially for England the important episode of the century was the repeal of the Corn Laws (1846). These laws imposed protective duties on foodstuffs—"corn" means "grain" in England—and as long as the landed aristocracy controlled the government through the Tory party, repeal was impossible. But Adam Smith's "The Wealth of Nations" made a powerful argument for free trade. Cobden and Bright organized the Anti-Corn Law League, and Sir Robert Peel, a Conservative of the new school, finally carried through Parliament the repeal of the Corn Laws. Free Trade remained the general policy of Great Britain until the World War forced a partial return to protection.

For the last half of the nineteenth century English political history centred around the names of Gladstone (1809–1898) and Disraeli (1804–1881). The latter (who ended his life as the Earl of Beaconsfield), born in London of Jewish parents, was the unquestioned master of the Conservative forces for a third of a century. Protection and imperialism were his cardinal doctrines. He was a master of brilliant debate, an accomplished novelist, and his term as Prime Minister (1874–1880) was notably successful in foreign affairs. Gladstone's first ministry ran from 1868 to 1874, his second from 1880 to 1885, his third was in 1886 (lasting only a few months), and his fourth lasted from 1892 to 1894. His extraordinary popularity rested on a marvellous gift of oratory—his was "the best barytone voice in Europe,"—backed by a moral earnestness that assumed God to be on his side. He

was naturally conservative, yet he became increasingly liberal in his political outlook and his career typified the gradual evolution of British opinion in the direction of social reform



GLADSTONE BRINGING THE IRISH HOME RULE BILL BEFORE THE HOUSE OF COMMONS, FEBRUARY 13, 1893.

From a contemporary engraving.

which culminated in the Old-Age pensions and similar legislation enacted under the Liberal leadership of Lloyd-George.

The most puzzling problem which disturbed English politics and defied solution throughout the nineteenth century

was the Irish question. It was complicated by the religious split between the Protestant Ulsterites of the north of Ireland and the Roman Catholics of the south. Gladstone fought in vain to give Home Rule to Ireland. In the wake of the World War the semi-independent Irish Free State was set up as a compromise. Whether it will satisfy the extremists remains to be seen.

The evolution of the British Empire has, Ireland aside, progressed with astonishingly little friction. It is of vast size, comprising more than one-quarter of the world's population and one-fifth of its area. The relationship of its component parts to Great Britain and to one another has been largely permitted to develop along the lines of natural growth. As a result the system is to-day full of anomalies, inconsistencies, and contradictions between the nominal, legal status and the reality. But, by reason of its flexibility, it has withstood even the extraordinary strains of the World War and shows no signs of weakening. Efforts have been made to federalize the system but without success. The British Parliament at London is still theoretically supreme. But the five self-governing dominions, Canada, Australia, Newfoundland, New Zealand, and South Africa, approach the status of free and independent nations, adhering to the British crown by free desire rather than compulsion. At the other extreme stands India, still ruled as a colony though slowly gaining rights of self-government. British rule in India, on the whole efficient, was marred by the terrible Mutiny of 1857, and since the

World War a nationalist sentiment has developed which has stirred considerable unrest.

Germany

In every case the rise of democracy in Europe was preceded by the development of a strong nation. Only in a thoroughly unified state could popular rule be installed. The Germanic peoples were among the last to develop nationalism, and they were necessarily slow to achieve democracy. These small, independent states had resisted unification until the strong hand of Napoleon forced consolidation in 1803. Feudalism, the Reformation, a variety of causes, had conspired to retard nationalism in Germany. Now rivalry between two great states, Prussia and Austria, developed a new obstacle to union. The former was overwhelmingly Teutonic—its only alien element was Polish. The latter, as has been seen, was a hopeless congeries of races and languages, Teutonic, Italic, Slavic. The ultimate victory of Prussia might easily have been predicted. Yet the historic prestige of Austria as the head of the Holy Roman Empire delayed the issue for generations. Napoleon destroyed the empire in 1806. The Allies by the Treaty of Vienna in 1815 substituted for the Holy Roman Empire a new German confederation which was a union not of countries but of rulers; it even included two foreign sovereigns, the kings of Denmark and Netherlands. Over this loose association Austria presided, and the idea represented a victory for Austrian over Prussian

ideas. Prince Metternich (1775–1859), the astute prime minister of Austria, helped maintain this status during the critical year of 1848, and in modified form it endured down

WILLIAM I PROCLAIMED GERMAN EMPEROR AT VERSAILLES, JANUARY 18, 1871.

From a painting by Anton von Werner.

to 1870, when Prussia finally organized the German Empire without Austria, and left even the Teutonic elements of Austria definitely out of the German picture.

Liberalism fared ill in the German states after 1815 in the general reaction from the horrors of the French Revolu-

tion. Yet, as industrialism advanced, the spirit of democracy increased. A number of states, including Bavaria, made certain concessions, and Prussia formed a customs union which built the economic foundations for Bismarck's later labor of consolidation. The Revolution of 1848 failed in the German states largely because the timid king of Prussia refused to accept the offer of the democrats to head a German empire. His successor, William I (reign: 1861–1888), was a strong and clear-minded ruler, and he called to his aid as minister the ablest European statesman of the century, Otto von Bismarck (1815–1898), a Prussian of the Prussians, a believer in the mailed fist, in the policy of "blood and iron," a hater of democracy, and a junker, which is to say a landed aristocrat, probably the most conservative class the world has produced. He set out to build up a powerful army based on universal military service and to oust Austria from the German union. A quarrel with Denmark over Schleswig-Holstein gave him his opportunity. Prussia and Austria had jointly defeated Denmark and annexed these provinces, but Bismarck insisted that they be made in effect a part of Prussia. When Austria refused, Prussia declared the German Confederation dissolved, marched against Austria, and defeated her forces at Sadowa (1866). The North German Confederation was thereupon organized by Bismarck as a half-way step to the empire. A popular Parliament was provided for, perpetuated in the Reichstag of the empire, but the chief power was reserved to a federal council, the Bun-

desrat, representing not the people but rulers, and this body was also preserved in the empire. The sequel was not long delayed. Bismarck picked his quarrel with the incompetent

OTTO VON BISMARCK.
From a photograph by Karl Hahn, Munich.

Napoleon III, united the South German states behind Prussia in a brilliantly successful war, and at Versailles in 1871 William I of Prussia was proclaimed German emperor. The powers of the emperor and of the Bundesrat remained para-

mount as in the North German Confederation, and the empire was launched upon its able, ruthless policy of militarism, industrialism, and expansion overseas, which ended only with the Empire's defeat in the World War. When Bismarck was faced by the rising tide of socialism under the leadership of Marxian ideas, he stole its thunder by instituting a series of socialistic reforms, including accident and sickness insurance and old-age pensions. But this was done paternalistically, not democratically by the representatives of the people. The German state also stole the thunder of the socialists in industry by operating railroads and mines, and generally exerting a powerful paternalistic control over capital as well as labor. The manufacturers of Germany were supported by protective tariffs, and the transition to a highly advanced industrial state was swift. Having picked his three wars and accomplished his international aims Bismarck played a conservative and pacificatory hand, making peace with Austria, and forming the Triple Alliance with Austria and Italy in 1882. William II, who came to the throne in 1888, was a far different type. He pursued a policy of colonial and trade expansion, of German imperialistic supremacy, arrogantly and blindly. As a result of his egotism Bismarck resigned in 1890, and the German Empire plunged ahead under its wild rider.

Austria

The Revolution of 1848 struck Austria from several quarters. The Italians rose in the south, the Hungarians and Bo-

hemians to the east; even in Vienna the populace drove Metternich from office. Chiefly, these were racial revolts, in this respect differing radically from the revolutions in France and Germany. At first fortune favored the revolutionaries, and it seemed as if Hungary, which had deposed the Austrian king, might succeed in becoming an independent republic under the leadership of the patriot Kossuth. But Russia came to Austria's aid, the rebellion was ruthlessly put down, and Austria resumed her supremacy over her alien and subject races in the east until her next international crisis. This came when Prussia defeated her armies at Sadowa, and in 1867 Hungary forced the formation of the dual monarchy known as Austria-Hungary. The emperor of Austria was to be king of Hungary, but there were to be two Parliaments, and the Hungarians could boast a virtual independence. Unfortunately, the Slavs within Austria gained nothing by this reform, and, supported by Russia and their fellow Slavs of the Balkans, they remained an explosive force within the ancient empire of the Hapsburgs. Thus, alone among the great nations of Europe, Austria entered the twentieth century without achieving that peculiar fusion of race, custom, economic interests, and sentiment which distinguished modern nationhood in the Western world. Able leadership was not wanting, for Emperor Francis Joseph, who reigned from 1848 to 1916, and saw both the Revolution of 1848 and the opening of the World War in 1914, was a beloved and intelligent ruler. The Hapsburgs lost their battle for unity,

DROPPING THE PILOT—FROM THE FAMOUS CARTOON BY TENNIEL, PUBLISHED AT THE TIME OF BISMARCK'S RESIGNATION.

It represents the chancellor leaving the ship of state, while William II remains in sole command.

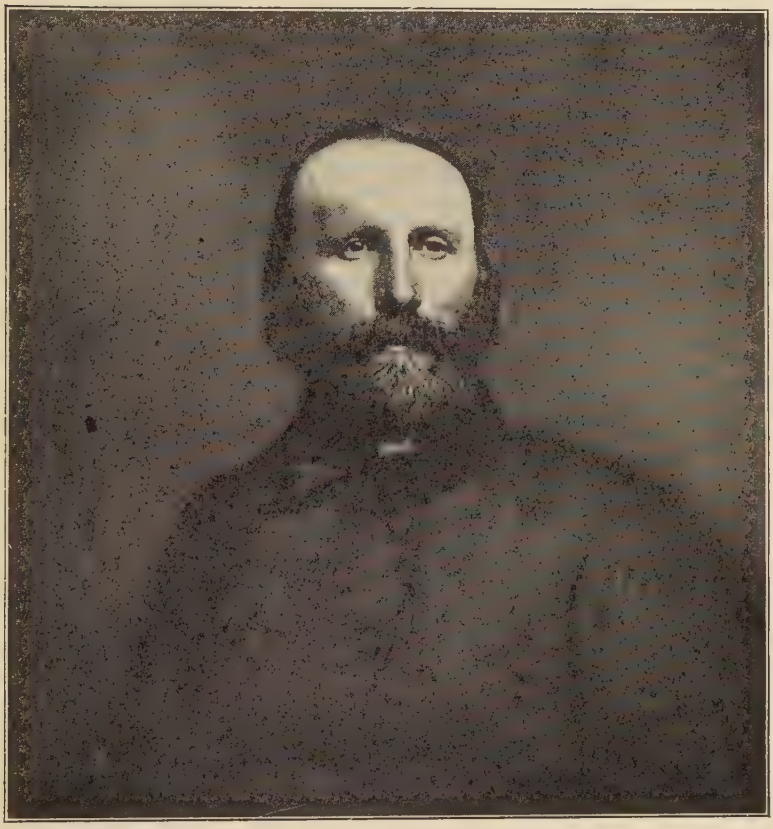
and Austria was reduced to a minor state by the World War because of the inescapable racial facts of the region which this house had for five centuries held together as the nucleus of an empire, at times setting its boundaries as far distant as the Straits of Gibraltar and the British Channel. If the World War was caused fundamentally by the exaggerated nationalism of Germany, it was immediately occasioned by a minor episode, the murder of the Archduke Ferdinand, in the unending quarrel between the Hapsburg dynasty and its Slavic subjects. The German people had rushed belatedly into a nationalism artificially stimulated and ruthlessly advanced in an effort to overtake more fortunate rivals. Austria had never achieved modern nationalism. Both were laggards in the Western world in this important item of unity and effective organization. Democracy reached Austria only after its hour of greatness had passed, probably never to return.

Italy

The battle of Italy for liberty and unity forms one of the most dramatic and moving pages of modern history. Unfortunately, its subsequent achievement of democracy has been one of the least successful in Europe. In the first half of the nineteenth century Italy, like Germany, was simply a geographical expression. The northern part was held by Austria; from Rome the Pope ruled the Papal States cutting clear across the peninsula; to the south a Spanish Bourbon reigned over the kingdom of the Two Sicilies. As a result of centuries

of division, Italy, from being the intellectual and artistic leader of Europe, had fallen far to the rear. Napoleon seized the peninsula and gave it an artificial unity, which was never forgotten. The reaction carried Italy to new depths of ignorance and poverty, but the revolutionary spirit of '48 found bold and inspired leaders ready for action. Two uprisings in the '20s, led by a secret society known as the Carbonari, had failed. Now a new movement known as the Risorgimento, or Resurrection, gained force among the youth of the land. Mazzini was the intellectual leader of the revolt, Cavour its man of practical wisdom, and Garibaldi its daredevil guerilla general. The rising of 1848 ended in disaster, ruthlessly put down by Austrian arms. But in 1860 the whole of the peninsula, save Venetia and Rome, was freed and united under King Victor Emmanuel, who had ruled over the kingdom of Sardinia, which comprised the island of Sardinia and also Piedmont, the northwestern part of the mainland of Italy. Venetia was wrested from Austria in 1866 as a result of Prussia's great victory. Napoleon III had played a shifty part in the warfare, finally siding with the Pope to preserve a remnant of his temporal power. But in 1870 he needed his armies at home, and Italian forces entered Rome, which was proclaimed the capital of the new kingdom. A constitutional monarchy was established modelled on the British system, and the ballot was extended gradually until manhood suffrage was achieved in 1911. But illiteracy and ignorance of Parliamentary rule have greatly handicapped the government,

which remained one of the most corrupt and least efficient of Europe down through the World War and until Mussolini



GIUSEPPE GARIBALDI.

seized the reins of power as a virtual dictator. He put the nation to work and gave it the blessings of a benevolent despotism. Its future is obviously unpredictable.

5. WORLD POLITICS

It is true of international politics, as of industry, that the nineteenth century merely applied and worked out to their logical conclusions the forces created in the eighteenth century or existing before. Yet by reason of the swiftness of scientific progress, reducing the size of the globe so as to bring the whole world into rivalry and industrializing warfare, international politics reached a new intensity that found its climax in the World War. The Far East found itself confronted by Europe, the United States entered the Pacific and embarked upon world policies, and the Pacific succeeded the Atlantic as the centre of international rivalry. World politics came into being in a new sense, and may be regarded as the chief international development of recent times.

The central force of international politics in the nineteenth century was the old one of nationalism. Largely founded in the Middle Ages, brought into the field of consciousness in the Renaissance, this peculiarly European product gained in vigor in the last century as a result of the advent of democracy. Certain causes of war were eliminated, for example, the old quarrel between dynasties, essentially private disputes that concerned the people not at all but which often devastated regions and killed thousands. But democracy introduced new sources of dispute which offset these gains. To begin with, the efforts of minorities to set up independent nations and of rival races to alter boundaries cre-

ated new and frequent causes of wars, especially in the Balkans, where racial elements were diverse and unreconciled and nationalism inchoate. The wars of democracy, including the great revolutions, may be dismissed for the future by the optimistic on the convenient theory that, once firmly established, democracy cannot be successfully attacked. Yet the case of Italy under Mussolini shows how easy it is to overestimate the solidity of democratic institutions in Europe. It is by no means certain that democracy is anything more than one more stage in man's experiments in governing himself, and, conceivably, other stages and fresh violence may accompany such changes. Finally, it is to be remarked that democracy introduced a new pride of patriotism that brought nationalism to its highest pitch of separatism. The first French republic was as imperial in its will to conquer as was Napoleon a few years later. The democratic empire of Great Britain fought the Boer War, and the democratic republic of America fought the Mexican War. Democracy may yet prove to be the pacificatory force that democrats assume it to be, but its record thus far is one of vigorous nationalism and, by one name or another, conquest.

The wars of these two centuries originated around four causes, sometimes acting singly, sometimes in combination. They may be roughly classified as the spirit of revolution (either to attain independence, as in the American Revolution, the revolt of the Spanish colonies in America, the Italian wars of liberation and the Boer War, or to overthrow a

despotism, as in the French and Russian Revolutions), colonial expansion (as in the Anglo-French wars for the American colonies and India of the eighteenth century, British wars completing the conquest of India in the nineteenth

GREAT BRITAIN'S OPPONENTS IN THE BOER WAR.
A typical group of Dutch farmers ready to uphold their rights against the English.

century, the Spanish-American War, resulting in the annexation of Porto Rico and the Philippines by the United States, and the race of the European powers, including Germany, arrived late upon the field, to secure colonies in Africa and "spheres of influence" in the Far East), the struggle toward nationhood (by Germany and Italy, the last two great powers of Europe to achieve unity, and by the Balkan States, which, owing to racial divisions, remain unstable), and the rivalry of established powers, seeking to remake the map of Europe and to gain the leadership of Europe or the world

(as did France under Napoleon, and the German Empire under Kaiser Wilhelm II).

The principal revolutionary wars and the march of colonial expansion have been described. The struggle toward nationhood of Germany and Italy has been related. Perhaps the American Civil War is most accurately classified with these efforts to perfect a nation. The Balkan wars remain, and, since they are inextricably intertwined with the ambitions of the major powers and led up to the World War, these great rivalries of Europe must first be outlined.

The year 1815 is often taken as a dividing mark between the old order and modern Europe. At the Congress of Vienna the Allies who had defeated Napoleon drew a map that was to last for half a century. They also adopted the new ideal of a concert of Europe which should organize the great sovereigns in a federation for the preservation of peace and the existing order. The Czar Alexander I sincerely proposed the plan under the title of a "Holy Alliance." It was accepted by most of the rulers of Europe as a pious gesture, Great Britain alone rejecting it as "a piece of sublime mysticism and nonsense." A number of congresses were held and several matters affecting the minor powers successfully handled.

But the breakdown of the Alliance was gradually forced by the rise of the Eastern, or Turkish, question, which touched not the minor powers but Russia, Austria, England, and France. The Holy Alliance provided for no rule of the

majority by which such vital questions could be settled, and, confronted by such an issue, the nations reverted to the old serviceable principle of the Balance of Power. This was an elementary rule of international common sense, dating from the days of Greece, and simply held that nations generally must seek to prevent any one nation from gaining such a preponderance of power as to threaten the security of the rest. It was a logical rule, but as applied it often produced sudden and amusing shifts. England followed it in the sixteenth century, siding first with Emperor Charles V when Francis I was winning, and abandoning Charles when Francis was defeated. It was the basis of the coalitions against Louis XIV and against Napoleon. Confronted by the Eastern question, in the nineteenth century England sided with Turkey in order to prevent Russia from becoming too powerful in the Balkans. The first trouble arose out of the Greek revolt against Turkish rule in 1821. All Europe watched with interest this war of independence, which was conducted with terrible ferocity on both sides. When it was on the brink of failing in 1827, Russia intervened to rescue the Christians of Greece from Mohammedan rule. England and France sympathized with the revolution but would not permit Russia to proceed alone. A joint intervention was arranged, which resulted ultimately, in 1832, in the complete independence of the Greeks. On the other hand, in 1853, when Russia sought to assert a protectorate over the Christians in the Balkans, Britain and France sided with Turkey and helped defeat Russia after a severe struggle in the Crimean War.

Throughout the century the Ottoman Empire, long called "the sick man of Europe," showed an amazing vitality. Driven slowly out of Europe, this vigorous race clung tenaciously to each line of defense. As a result of the Crimean War, her government, "the Sublime Porte," was accepted as

THE ROLL CALL, CRIMEA, 1854.

The French and British suffered greatly from privation and disease in the Crimea. This painting shows a British regiment lined up for inspection, although most of them can hardly stand.

a member of the European family and strengthened in its foothold north of the Bosporus. It was not that England and France loved the Turks more, but that they loved Russia less. England especially feared the effects of a victorious Russia upon her colonial interests in India.

There have been three major Balkan wars since Crimea. The first, in 1875, was a great uprising of the Slavic peoples, beginning in Herzegovina and spreading into Bosnia, Macedonia, and Bulgaria. Serbia, that had achieved a degree

of independence in 1817, joined the revolution. The Turks were near victory when Russia again intervened and changed the tide of battle. The Sultan Abdul Hamid II was driven back upon Constantinople, and forced to sign a treaty that nearly wiped out Turkey in Europe, though England and France and Austria came to her rescue. Roumania, Serbia, Montenegro, and Bulgaria achieved full independence, Bosnia and Herzegovina became an Austrian protectorate.

There was constant protest in the Balkans against the limited boundaries of the new states, Greece fought a brief and futile war to gain the island of Crete (1897), and in 1912 the Balkan League commenced a united offensive against Turkey (usually referred to as the First Balkan War). The Allies were swiftly victorious, but as swiftly began to quarrel over the spoils. Bulgaria sought to take the lion's share, and as a result the Second Balkan War began (1913), in which Bulgaria fought her former allies and Turkey as well. Bulgaria was defeated and the Turks regained a little ground. The settlement satisfied no one, and the outbreak of the World War found the whole peninsula in a ferment. The immediate occasion of hostilities in 1914 was the bitter feeling between Serbia and Austria over Bosnia and Herzegovina, which the Serbs regarded as racially akin. Thus the Balkans, by reason of their hopeless mixture of races, entered the twentieth century without achieving national stability.

It must not be thought from the fact that England repeatedly united with France against Russia that any Anglo-

French entente existed at this time. To the contrary, the memory of Napoleon lived on in English minds to awaken constant suspicions of French motives. When Napoleon III resurrected the French Empire, his ambitions justified alarm.

THE LANDING OF COMMODORE PERRY IN JAPAN.

The grandiose ideas of that monarch included the conquest of Mexico (1863–1867), and the tragic adventure of Maximilian of Austria was ended only by the blunt opposition of the United States, acting under the Monroe Doctrine, to keep European ambitions out of the Americas.

In the Far East the only people to maintain their independence and develop into a nation comparable to the European nations was Japan. The change came with amazing swiftness following the opening of Japan to the world in

1853 by the visit of an American fleet under Commodore Perry. At that time Japan was living under a feudal system bearing many resemblances to the feudal system of Europe in the Middle Ages. Within a generation a revolution was effected without a parallel in history. Feudalism was abolished, serfdom was ended, a national army was established, the machine age was installed. Japan was Europeanized in government, in industry, in learning. Having absorbed so much from the West, this alert, ambitious people set out to copy the colonial policies of Western nations. Seeing China in process of dismemberment by European powers, she fought China (1894) and easily defeated that huge nation but was deprived of her conquests by the Western powers. Russia proceeded to build the Trans-Siberian Railway and seize Manchuria, the northeastern province of China. Japan saw her chance of western expansion disappearing and brought on the Russo-Japanese War (1904–1905). She was victorious on land and sea, and by the terms of peace gained her first foothold in China. In 1910 Japan followed up this policy, by annexing Korea. The victory over Russia brought Japan the rank of a great power, gave her people a feeling of confidence, and aroused fears in the Western world of the "Yellow Peril," fears that had been forgotten for a thousand years.

By contrast, China has resisted Europeanization, has not developed a national unity of the Western type, and in consequence has been largely overrun by the European nations.

From a photograph © Underwood and Underwood.

THE SIGNING OF THE PEACE TREATY THAT ENDED THE RUSSO-JAPANESE WAR.

Envoys from Russia and Japan brought together by President Roosevelt on board the *Mayflower*, August 5, 1905.

Japan, with a population of little more than fifty millions, by accepting European civilization, has been able to do what China, with three hundred millions, is still struggling to accomplish. Yet considering the many factors that enter into the success of a people, it would be folly to conclude that

the Japanese, by reason of their swift adaptation, had outstripped China. The extraordinary abilities of the Chinese people have been indicated before and their dignity, honesty, industry, and capacity for local self-rule are still impressive. Chinese isolation was forcibly ended by the European powers beginning in the middle of the nineteenth century. Upon various pretexts, ports were seized and provinces annexed. Russia took the coast to the north, France, Anam, Tonkin and Cambodia to the south, England seized Burmah adjoining India. Even Germany got a harbor, Kiao-Chau, in 1898. In addition, commercial "spheres of influence" were allotted to the powers. These invasions had, in the meantime, stirred a revolt against the "foreign devils." A secret society, popularly known as the "Boxers," led an uprising (1899–1900) which killed many missionaries and traders and brought an international army to Peking to take a bloody revenge. Thereafter the tide turned rapidly in favor of Western civilization in China, Western learning was welcomed, and in 1912 a revolution overturned the Manchu dynasty and set up a republic with Sun Yat-sen as its first president. But the Chinese were not ready for so radical a change and the republic disappeared in a welter of warring generals and armies from which no stable government has yet appeared. Industrialization has slowly entered China but conservatism and a preference for Chinese institutions have prevented any swift and wholesale Europeanization such as took place in Japan. The latter country has extended her influence and power in China

as rapidly as the other powers would permit. The policy of the Open Door, urged by the United States, has been a considerable factor in saving China from complete dismemberment.

Last to feel the thrust of European colonization and the effects of world politics was Africa. Not till the last decade of the nineteenth century did the real scramble for African colonies begin. The interior of the "dark continent" had been explored by Europeans only a few decades before. Barring its northern shore on the Mediterranean, which was one of the earliest habitations of civilized man, the continent was cut off from the rest of the world by its lack of harbors, its outer rim of mountain ranges, its unnavigable rivers and its great deserts. Geography can explain the slowness of exploration and development. One may guess that it was also the cause of the backwardness of the various black and brown races which inhabited it. But the puzzling problem of race is too little understood to permit any confident explanation.

Africa is a continent without a history and the archæologists and anthropologists have as yet reconstructed little of this vast chaper of the human story. Only two ancient skulls have been discovered, one, the Rhodesian skull, suggesting a distinct species of man more simian than Neanderthal. Aside from the dark-white peoples of northern Africa, the Hamites, the Semites, the Libyans, the two great stocks of central and southern Africa are the Negro of varying height and the short, yellowish-brown Bushman. (The Hottentot

is generally regarded as a mixture of the two with other stock.) But the minglings have been many and no sharp lines of racial division exist. Roughly speaking, north and northeast as far south as Abyssinia and Somaliland the dark-white stock predominates; the Negro's territory comprises the equatorial forests and river regions of the Niger and Congo; the Bushman prevails in the south.

Such were the primitive peoples whose territory the European nations proceeded to divide, from 1890 to 1900. Great Britain secured about a third of the continent, in protectorates and colonies of varying size, north, east, south, and west. Germany's colonies, on the east and west coasts, were relatively small and poor. Even the Portuguese colonies, also east and west, were better. France secured the largest share, but since it included the Sahara desert its area meant little. What counted was the inclusion of Tunis, Algeria, and Morocco. For the control of the last Germany made a bold bid; but the two diplomatic episodes of Algeciras and Agadir settled the contest in favor of France. This was thanks in large measure to the support of England, which ignored the petty "Fashoda incident" of 1898, a rivalry between far-flung lines, and built in its wake the entente cordiale. France has since developed her north African colonies into a rich empire. The island of Madagascar is also a valuable French possession. Like Germany, Italy entered the scramble for colonies at a late hour and Tripoli was all that she could capture. Altogether the partition of Africa into the patch-

From a photograph © Burton Holmes, from Ewing Galloway.

A STREET SCENE IN FRENCH MOROCCO, WITH THE KOUTOUBYA TOWER IN THE BACKGROUND.

work which it now appears on the map, was accomplished with little warfare. The one great dispute was the Boer War, fought between one breed of colonizer and another. South Africa was settled by Dutch colonists in the seventeenth century. It became part of England by the Congress of Vienna. The disagreement between the Dutch and British colonists resulted in the Boer War (1899–1902), opposed by a vigorous minority in England as a brutal act of conquest, yet, in the end, producing a British success wherefrom the Dutch of South Africa entered the British Empire.

As often before, the European nations were so intent upon past dangers that they failed for a long while to perceive the new threat to the Balance of Power—the German Empire riding swiftly to domestic power and stirred by overseas ambitions. There were ample warnings—at Algeciras in 1905 and at Agadir in 1911. But for a large part of England the conflagration of 1914 came as a cruel surprise. The nations of the world were forced to unite against Germany to preserve the Balance of Power much as they had united against Napoleon a century earlier. The United States was forced to cross the Atlantic to help defeat the German drive toward world mastery.

This brief analysis of the immediate cause of the World War is based on the prevailing view of historians of the Allied nations and America. It does not include the point of view of German historians or of the minority of Allied and American historians who agree with them. Concealment,

passion, national and racial prejudice, make the truth of any conflict difficult to ascertain. Generations may elapse before the basis of an impartial view emerges.

Certain remote, underlying sources of antagonism which made war an accepted probability in the European mind have already been suggested, for example, the racial confusion of the Balkans and the intense nationalism of the rest of the Western world, which democracy strengthened rather than weakened. The economic rivalry of the modern world has played its part; for one detail therein, the late arrival of Germany upon the world stage blocked her adequate colonial expansion. On the other hand, despite handicaps, German trade, by industrial energy, scientific knowledge, and commercial skill, was fast outstripping British trade, when the World War arrived. The factors which control the human mind are too little understood to permit any thorough analysis of national motives. The most that can fairly be attempted is an arrangement of the more objective and ascertainable facts directly initiating the war.

These show, in the prevailing opinion of Allied and American historians, that Austria-Hungary started the war in the Balkans with the approval and support of the German rulers and that the German decision to strike was born of fears and ambitions long held by her leaders and by them fostered in the mind of her people. To what extent those fears and ambitions were justified must be left to future generations to decide—with a justifiable doubt that they will ever under-

stand enough of the human scene to reach a final judgment. The tentative character of every historical conclusion could not be better illustrated than in the problems raised by the origin of the World War.

The facts of the war itself are clearer and they deserve recording even in this brief sketch of the past by reason of the colossal human tragedy involved. Whatever interpretation future historians may place upon the facts, the drama of the great struggle will remain one of the most poignant and critical chapters of the human story. Germany and her associates, Austria-Hungary, Turkey, and Bulgaria, were most of the time outnumbered more than two to one—after Russia abandoned the Allies, the United States joined them. A score of nations declared war against the Teutonic powers. Yet by reason of Germany's superior preparation, her leaders had justification for expecting a short and successful war. Her plans called for a swift invasion and conquest of France before England could train her troops or equip them, and before the vast but ineffective Russian army could strike. Therefore, proceeding with true Prussian efficiency, Germany ignored her treaty obligations to protect Belgian neutrality and attacked France by the easiest route, via Belgium (August 4, 1914). Great Britain was unprepared for land warfare and her utmost support, hurried across the Channel to the aid of France, played a heroic but secondary part in this first act of the war. The German war machine drove across Belgium and into northeastern France with superb

efficiency. The early French counter-attacks were premature and ill-advised. It was not until the German forces were almost at the gates of Paris that their line, stretching eastward to Verdun, was halted. In the Battle of the Marne (Septem-

From a photograph © Brown Brothers.

RUINS AT LOUVAIN, BELGIUM, WHICH WAS ENTERED AND PARTIALLY DESTROYED BY THE GERMANS IN 1914 IN REPRISAL FOR ALLEGED CIVILIAN ATTACKS ON THEIR TROOPS.

ber 5–9, 1914) the French took the offensive, disorganized the German drive and forced a retreat of twenty to forty miles. The victory was based both on German over-confidence and blundering and French élan and generalship. The battle was of incalculable value to the morale of the Allies and may well be ranked by future historians among the most significant battles of the world. For, while it was wholly in-

decisive of the ultimate issue, it ended finally the German plan of crushing France before Russia and England could make their numbers felt. Thereby the contest became one of trench warfare and slow attrition of man-power and time

From an official photograph.

TROOPS IN THE TRENCHES.

The soldier in the background is looking at No Man's Land through a trench periscope.

was afforded not only for Russia and Great Britain to play their parts but for the United States to arrive at the eleventh hour and turn the scales decisively against Germany.

Even before the Battle of the Marne the Russian forces invading East Prussia were trapped and overwhelmed in the thickets of Tannenberg (August 27–30, 1914) by Hinden-

burg. Thereafter the Russian armies re-formed, fought bravely and successfully against the Austrians, overrunning a large part of Galicia, and, once trench warfare was established on the eastern front, held their ground against the

From a photograph © Underwood and Underwood.

BRITISH AND AUSTRALIAN TROOPS AT ANZAC COVE, GALLIPOLI.

Germans. Yet by the end of 1914 it was plain that Russia had shot her bolt. She lacked both officers and ammunition and the need became urgent to link the east and west fronts of the Allies so that equipment could be furnished to the Russian forces and Russian man-power be used to the best advantage. Germany operating on interior lines could from the start strike east or west as she willed.

Hence came the Dardanelles-Gallipoli campaign of 1915, lasting from February to December, and ending in bitter failure for the Allies. The major strategy of the movement was admirable; the execution was hesitant and blundering. Had it succeeded, Turkey, which had entered the war on the German side in October, 1914, would have been isolated, all the Balkans would have been driven to the Allied side, and the European front and the Russian front of the Allies would have been united. Twice victory was close at hand. But incompetent generalship brought the operation to a close after heavy losses.

Meantime, during the summer of 1915, the German forces renewed the offensive in the East and the Russian armies, fighting with a diminishing supply of guns and ammunition, were driven steadily backward. Russia fought on through 1916, sometimes with much success, but the crushing losses of 1915 were the beginning of the end, which came with the revolution of March, 1917.

The year 1915 was as disastrous for the Allies diplomatically as it was militarily. Italy, to be sure, came in on their side in May; but considering the Italian Irredenta which Austria held in the northeast, she could hardly do otherwise. (The Triple Alliance of Italy, Austria-Hungary, and Germany was forced upon Italy in 1882 by the grim threats of Bismarck and had long outlived reality.) By Allied delay and bungling, the wily King Ferdinand of Bulgaria was allowed to slip into the Teutonic Alliance. Thereafter German

military ability supported German diplomacy in the Balkans with swift and brilliant success. Serbia, Montenegro, and Albania were overwhelmed and united with Bulgaria

GENERALS JOFFRE, HAIG, AND FOCH AT THE FRONT IN 1916.
From a photograph in the Imperial War Museum.

and Turkey in that Mittel-Europa which German statesmanship had long envisaged.

On the western front in 1915 the stalemate of rigid positional warfare was definitely established after a series of costly Allied offensives called "nibblings." Joffre aimed to break through precisely as the German forces under Falkenhayn were breaking through in the East. But artillery, which

had forced trench warfare, alone could end it, and the Allies, so far from having the needed superiority in artillery, were actually inferior. Soissons, Champagne, and Artois were the

From a photograph © Underwood and Underwood.

AN AMMUNITION FACTORY AT BETHLEHEM, PA.

principal French attacks of 1915, Neuve Chapelle the chief British offensive. All gained ground, but at a terrific cost in man-power, and no break-through was successfully followed up. The one offensive by the Germans on the western front deserves mention for the first use of poison gas in warfare. This was the Second Battle of Ypres in April, 1915. It is an interesting speculation that this surprise attack with a new weapon might have won the war for Germany if it had been used upon a large scale. It won a considerable local suc-

cess, but the gas-mask was developed as a defense against it and trench warfare was again stabilized.

While Germany was winning these military successes of 1915, she was already embarking on the undersea campaign that was to prove her undoing, and the sinking of the *Lusitania* (May 7, 1915) had foreshadowed the policy of frightfulness which ultimately forced the United States into the war. Thus this critical year brought into play all the factors of the great struggle. By making ammunition and equipment, including such new weapons as airplanes and submarines, the essentials of victory, the war became a true war of peoples and the vast industrial forces behind the lines assumed an equal importance with the troops at the front. The test became one of nation against nation, not armies against armies.

The year 1916 was a period of continued stalemate, but, on the whole, better for the Allies than for Germany. Verdun, the Somme, and Jutland were the great names of the year. Falkenhayn devised the disastrous attack upon Verdun, the most intense test of human courage the world had witnessed. It lasted from February to December, cost 250,000 to 300,000 German lives, and failed utterly, thanks in no small part to the genius of General Pétain. The Somme was chiefly a British effort under the command of Sir Douglas Haig, timed to aid both the French at Verdun and the Russians in the East. It was a vast attack, desperately fought and more costly even than Verdun. It failed in a strategical sense since no

break-through was accomplished. Yet by a lavish use of artillery and the trial of the tank, it pointed the way toward the ending of trench warfare and the return of a warfare of

From an official photograph.

AN ENGLISH HOWITZER IN THE ACT OF FIRING.

Note the camouflage screen erected as a protection against enemy airplane observers.

movement. The naval Battle of Jutland was another draw, disappointing to British hopes, claimed in Germany as a victory, yet clearly establishing British control of the seas—barring only the peril of the submarine—for the rest of the war.

The year 1917 was a dark one for the Allies, relieved only

by the entrance of the United States into the war. Russia collapsed. Italy suffered a terrible disaster at Caporetto. The only complete Allied success was the capture of Jerusalem

From an official photograph.

PART OF THE AMERICAN EXPEDITIONARY FORCE ON MARCH TO THE FRONT.

from the Turks by British troops under General Allenby. West front operations were bloody and discouraging, so much so that insubordination appeared in the French army and defeatist propaganda nearly wrecked the French government. The most important battle of the year was Cambrai, where

From a photograph © International Film Service, Inc.

AMERICAN MARINES ON PARADE IN PARIS, JULY 4, 1918.

the British won a great success with the aid of tanks and then suffered a severe reverse. By breaking the Hindenburg line it showed that warfare of movement could be restored. But this costly land fighting, depressing as it was, sank into insignificance, by comparison with the German submarine offensive, which reached its climax in 1917. Ludendorff decided to risk all on this effort to destroy the Allies' means of communication and starve England. As a principal result, the United States declared war against Germany on April 6, and thereafter the only question was whether this country, unprepared for war, could become effective on the battle-field in time to be of aid. The submarine threat was met and halted by the summer of 1917, and the greatest German blunder of the war had not only failed of its objective but, by bringing the United States into the war, had made defeat almost inevitable.

Since time ran against him, Ludendorff gambled all in 1918 on two series of great offensives. The first attack was directed toward Amiens with a view to separating the British and French forces. It began with a sensational success but was finally halted. The second of the northern offensives was less successful. Thereupon Ludendorff turned to his final effort, the three great offensives toward Paris, which carried the German armies once more to the Marne and brought American troops for the first time into the line on a considerable scale at Château-Thierry and Belleau Wood. But the tide had now definitely turned. Under the unified command

of General Foch, with fresh American troops rapidly coming into the line, the fate of Germany was sealed. Four great Allied offensives were begun in the month of September which drove the German forces before them from Flanders to the Argonne. By November, Germany was on the edge of disaster in the field and in the throes of revolution at home. An armistice came swiftly and inevitably on November 11.

The losses of the war were terrific, in scale with the millions of soldiers engaged, the length of the struggle, and the deadliness of the engines of war invented by modern science. The dead alone totalled 8,000,000 in round numbers, of whom the Allies lost 5,000,000. France lost 1,600,000, Germany 2,000,000. The Russian dead have been estimated at 1,700,000. Great Britain lost 900,000 dead. The wounded were more than twice the killed. The economic wastage was colossal.

The peace of Versailles was nominally based on certain general principles stated by President Wilson, commonly known as the Fourteen Points, and included in part in the terms of the Armistice. The general aim of these points was to assure a peace of justice rather than conquest, but the result inevitably fell short of this idealistic standard. France regained Alsace-Lorraine and the Italian boundary was pushed far to the northeast so as to secure her frontier against Austria. Poland was restored to the dimensions of a major power with a new and strange appendage, a corridor running to Dantzig on the Baltic Sea. Pursuant to the principle of

From a photograph © Underwood & Underwood.

THE PEACE CONFERENCE IN SESSION AT VERSAILLES.

self-determination a long list of new nations was created, including Czecho-Slovakia and Jugo-Slavia (which is to say, South-Slavia). Austria was reduced to a minor power. Germany lost home territory and her colonies as well. In addition, a reparations bill was assessed against her. The League of Nations was created by the terms of the peace treaty to provide territorial guarantees and machinery for the prevention of future wars.

It can be argued that a peace of conquest could hardly have produced more dissatisfaction and unrest than has resulted from the peace of Versailles. The increase in the number of petty nations has added to the sources of European quarrelling. The collection of the reparations bill raises a tedious and irritating problem. In the League of Nations is offered the one promise of better feeling and security. Yet the nations of Europe have reverted generally to the old system of alliances. France has built up a Little Entente, hemming in Germany. Germany has sought a rapprochement with Russia. England as usual remains somewhat aloof from the European scene, while seeking close economic relations with Germany.

Warfare has been frequent in the decade since 1918. The economic reconstruction of the European nations has been a slow and painful process. Yet, on the whole, recuperation from the wounds of the World War has made extraordinary progress. Once more man has survived a colossal disaster and returned to his task undismayed.

CHAPTER XXI

THE TWENTIETH CENTURY

If history were an exact science it might be possible to weigh the elements of the present and plot the future of the world. But knowledge of the past is fragmentary, the interpretation of known facts shifts with the changing wisdom of man. The springs of human action are so various that the unexpected is the normal. An accurate forecast of such issues is out of the question.

The most that can be done is to set down some of the forces operating in the world, thereby suggesting some of the directions in which changes may march. In thus speculating the danger is of overcertainty and of confusing hopes with probabilities. The effort in this volume has been to present the past as the rich and changing background of man's actions, potent to stir his imagination and emotions, and useful in adding to the basis of his judgments—part instinct, part logic, part guess—by which the major decisions of individuals and of nations must inevitably be reached. Man needs all the past he can discover to aid in these rule-of-thumb choices. He must steadily realize, however, the imperfection of his premises and the large factor of doubt in every conclusion.

It is extremely difficult to analyze a period from a point of view within it. Yet one general aspect of the early twentieth

century is fairly clear, and it intensifies the difficulty of accurate forecast. That is the confusion of currents into which the century has been carried. If no period is as simple as it seems to later generations—the Napoleonic reaction from democracy seemed to many at the time the end of all democracy—there have been many eras when certain forces were sufficiently powerful to sweep other motives aside and give a considerable degree of unity to its events. No such singleness of theme has yet appeared in the twentieth century.

Science and democracy are still the two conspicuous forces as in the two preceding centuries. The present may therefore fairly be classed with the years that went before. But the working out of these two themes, in so far as they touch human life, has lost its earlier clarity. Through the machine the influence of science has been multiplied many fold, and the rate of scientific and mechanical progress is still constantly increasing. But the triumph of science has been darkened by doubt, partly born of the terrible destructiveness of the World War, partly of the evils of machine labor, partly of the realization that science has not solved man's religious problems. Similarly, while the general trend toward democracy has not ceased and the extension of the ballot, as of humanitarian legislation, continues, several abrupt and striking breaks in the tradition of popular self-government have occurred, notably in Russia and in Italy. The general faith in democracy has been somewhat weakened and the progress of self-government is seen to be far from the simple advance that revo-

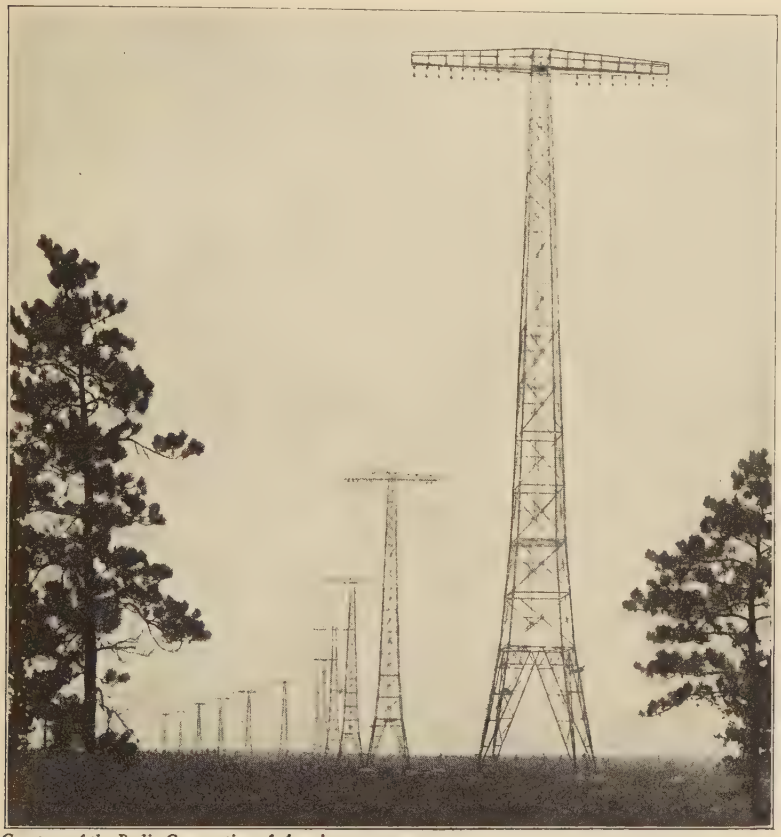
lutionary thinkers in the eighteenth century and democratic thinkers in the nineteenth century considered it. Reaction is scarcely too strong a word to describe present attitudes toward science and democracy. The reaction after the French Revolution offers a partial precedent, though the parallel between Napoleon and Mussolini is too incomplete to be convincing. At the least, strong cross-currents have entered the main stream of Western thought.

I. MAN AND THE MACHINE

Progress in the older sciences was never as swift and dramatic as to-day. Entrance into the atom has revealed a new universe and no one can predict the sequel. Similarly, invention has leaped all bounds and the machine age is already surpassing the wildest dreams of its prophets. It is no failure of the scientific spirit in its own field which has stirred present doubts. The weakness, if it may be so called, lies deeper, in the character of man, in the failure of his instincts, his emotions, his intelligence in the broadest sense, to cope as yet with the new and puzzling problems which science has raised.

The nineteenth century heard much of a supposed warfare between science and religion. Many of the most intelligent minds expected science to defeat and replace religion. As a result, the old creeds lost ground. Yet the recent swift advances of science have served only to clarify its limitations. It has not even begun to touch first and last truths, the ultimate problems of the universe concerning which man has

relied upon religion for beliefs to live by. The old warfare is seen to be unreal, but the damage to faith has been great



Courtesy of the Radio Corporation of America.

THE TOWERS OF "RADIO CENTRAL," AT PORT JEFFERSON, LONG ISLAND.

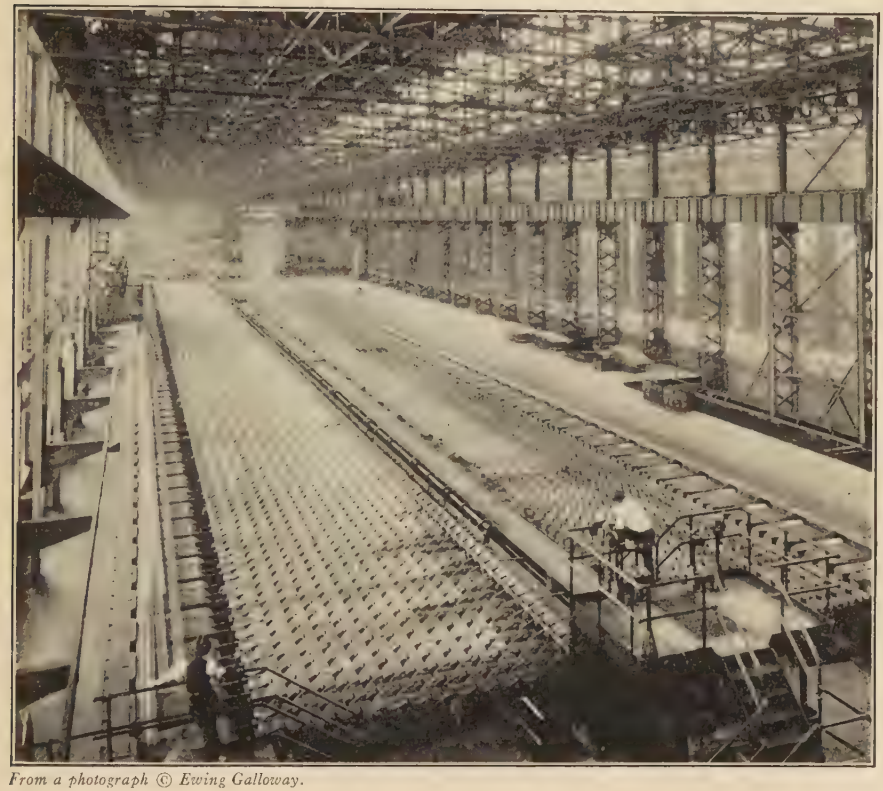
This is one of the great developments of the twentieth century.

and the current revival of interest in religion is too vague to inspire confidence. In this field, of prime importance to man's conduct and happiness, the present view would be that science has destroyed and has not replaced.

The effects of the machine have been clearer, and certain specific gains and losses can be set down. An English novelist, Samuel Butler, led the criticism of the machine age in the late nineteenth century. He perceived that the substitution of machinery for much of manual labor was not the unmixed blessing that earlier thinkers had expected it to be. He noted a tendency to reduce human beings to mere tenders of machines, and, instead of freeing man from toil, to make him in a very real sense the slave of his machine. In large-scale production of the American type, the machine displays a skill simulating intelligence and it is the man who is the automaton. Hours of labor have been shortened, but there has been a decline of old-fashioned craftsmanship which cannot but be regarded as a heavy loss. The intelligence and character that skilful creative work develops must now be sought in other activities.

It is already clear, however, that this picture of gloom is far from the final word upon the machine age. There are many facts which suggest that the full development of machinery may greatly reduce the amount of such "slave" labor and so shorten hours as to free men generally for other activities. Man would then have to seek his main satisfactions in sport or amateur craftsmanship. Here is a prospective revolution in man's conduct and motives for action which may or may not work out to his ultimate good. At any rate, it looks far beyond the deadening routine of reiterated motions which Butler feared.

As an essential part of this system of production America has made an important contribution since the World War by discovering the possibility of large-scale consumption to keep

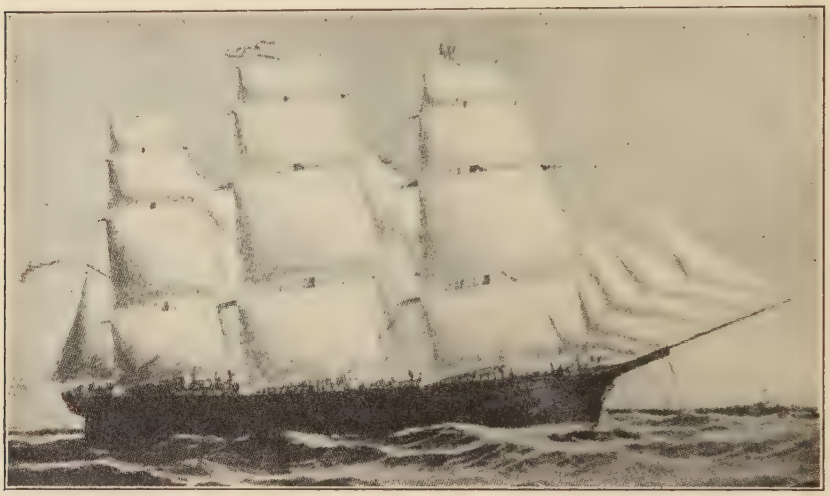


From a photograph © Ewing Galloway.

LARGE-SCALE PRODUCTION AT THE FORD PLANTS IN DETROIT.
The entire floor is covered with cooling racks filled with Ford body parts.

pace with large-scale production. The extraordinary goal has been achieved of increasing wages while decreasing prices. The exact economic principles involved are far from certain, but American business is being won to the practical view that only by sharing increasing income with workers in the form

of increasing wages and with the public by reducing prices in order to develop new purchasers can a market for the output of quantity production be found. The American market-



THE CLIPPER SHIP, *ORACLE*, BUILT AT THOMASTON, MAINE, IN 1853.

ing system through large-scale advertising obviously plays its part in such consumption, and so does instalment buying. The limits of this extraordinary development may soon be discovered. On the other hand, it is possible that America has worked out a system which will speed the complete development of the machine and raise the level of living for all classes far above the most optimistic hopes of humanitarians or socialists.

On the favorable side of the machine balance must also be set down the great adventure of flying and similar tests of man's courage and adaptability, created by invention. The

passing of the sailing-ship, for example, involved a real decline of romance and beauty which the world could ill afford to lose. But the aeroplane has replaced it with an even more

From a photograph © Ewing Galloway.

THE *LEVIATHAN*, ONE OF THE LARGE TRANSATLANTIC LINERS.

marvellous adventure. The truth seems to be that the progress of invention is so swift and changing that a comprehensive estimate of machine labor and its effects is impossible. The last word has not been spoken and may never be spoken. Meantime we shall probably continue to live for generations in a world of Aladdin's-lamp wonders, and the slaves of the machine will at least be able to refresh themselves by rubbing the lamp of science and performing every-day miracles which surpass the wildest fancy of the "Arabian Nights."

2. THE FAILINGS OF DEMOCRACY

As the records of history show, government of every kind has had its full share of human blundering and vice. The failings of democracy, much stressed in current writing, should obviously be compared not with an ideal perfection or with the hopes of prophets, but with the standards actually set in the past by other forms of government or to be reasonably expected from them in the future. So compared, modern democracy has little to fear save by contrast with a few brief reigns of benevolent despots. The post-war discontent with democracy might therefore be dismissed as probably only a passing impatience were it not for the fact that two great Western nations have lately turned their backs on the democratic idea to experiment with rule by minorities. Whether Russia and Italy stand by their present governments or not, this break in the democratic tradition has been a striking one and has led to a searching criticism of the whole democratic theory.

The facts are elusive, the issues highly controversial, and it is impossible to present any accepted views of current political tendencies. A few of the major criticisms prevalent in America may be set down.

The political failures of democracy centre about the failure of the individual voter to exercise his franchise intelligently and effectively. There has been a great increase in honesty of balloting in the century of popular voting; the

increase in intelligent voting has been discouragingly slow. Political bosses have substituted organization and clever leadership for cruder methods, and their power remains as strong

From a photograph © Wide World Photos.

A MASS MEETING AT GASTONIA, N. C., DURING THE RECENT TEXTILE STRIKE ORGANIZED BY COMMUNIST AGITATORS.

as ever. In quality of representation many critics feel there has been a deterioration in ability, due largely to the more direct methods of voting. Many theories have been put forward and much reliance has been placed upon changes in the

mechanics of voting and representation. The fundamental weakness of democracy remains as clear as does its fundamental strength. It is a clumsy, wasteful system of control which rarely permits a country to be governed by its ablest men. It does, however, create a stable state, for serious discontent is forestalled by the share which every voter has in the direction of affairs.

The Russian dictatorship by a small group of socialistic leaders was born of the conception of "direct action" which entered radical philosophy before the World War. This policy urged the working man to enforce his claims by sabotage —injuring his employer's machinery, and so forth—or any other direct action as distinguished from the older methods by voting, negotiation, or bargaining. The I. W. W. was a small pre-war eruption of these views in America. The Bolshevik party in Russia carried the policy to its logical conclusion by seizing and holding the state. "Dictatorship of the proletariat" was the official self-designation of this movement; control rested in a small group representing a small party, and the great mass of the people, like the old aristocracy and the old bourgeoisie, were ruled as ruthlessly as under the czar.

The announced object of the revolution was the seizure of all private property, including land, and the organization of a socialistic Marxian state. Industries were to be run by the workers of each factory, and representation in the government was to be based upon these labor organizations, called

soviets. The Marxian ideal was never achieved. At the very start the peasants rejected the communistic ownership of land; they rejoiced at the division of the great estates upon which they had toiled as serfs and refused to compromise

From a photograph © Ewing Galloway.

THE RUSSIAN SOVIET SYSTEM IN OPERATION.

The presidents of seventeen village soviets in conference.

their newly won control. The soviet system was installed in industry and, as might be expected of any social experiment, a long period of inefficiency followed. In commerce the soviet government found it necessary to countenance a so-called new economic policy, which in effect restored the principles of private property and capitalism to the small

tradesmen. The recession from communism has been extensive, and whether the economic compromise that has resulted will endure remains to be seen.

Politically, the dictatorship of the Bolshevist minority has undergone little development. It has remained after ten years a revolutionary despotism, repressing free speech, interfering with the freedom of religion, executing political opponents, and generally exhibiting the characteristics common to all despotisms. No share in government has been granted to the great mass of Russians. Soviet agents have been active in other countries the world around, endeavoring to incite a world-revolution against the capitalistic system. As a result of this fantastic effort Russia has been largely cut off from intercourse with the rest of the world.

The example of Italy shows some striking resemblances to the Russian overturn and many sharp contrasts. The aim in Italy was the exact reverse of the Russian purpose. It was to preserve capitalism, nationalism, and the existing order against a threat of socialism or communism. The inspiration came from one popular leader, Mussolini, instead of a group, as in Russia; and while he built his strength on the Fascist party and utilized the existing parliamentary and monarchical institutions, he followed more closely the Napoleonesque tradition of one-man dictatorship. Free speech has been repressed and political opponents forced into exile. Industrially, a new efficiency has been achieved, and the material benefits to Italy have been great. The most serious problem is that

inherent in every benevolent despotism: What will happen when Mussolini meets his end?

It needs to be stressed that Russia was the most backward nation of Europe politically at the time of the World War,

BENITO MUSSOLINI.

and the terrible repressions of absolutism made some great explosion almost inevitable. Whether or not Bolshevist rule develops any principles of value to the more advanced nations, it at least was a natural reaction of the sort that normally accompanies the overthrow of a tyranny. Italy led the Western world intellectually in the Renaissance, but it has consistently lagged far behind in its political life. It had but

a few generations of experience with free institutions when the test of the World War arrived, and the parliamentary system, functioning through a responsible cabinet, had never worked effectively.

It may therefore be contended that both of these anti-democratic movements originated from special causes, and neither holds any general moral for the nations of the Western world more experienced in political self-rule.

The democratic experiment was generally regarded in the nineteenth century as linked with universal education. The post-war reactions have renewed the plea for more and better education. In addition, there has been an urgent demand upon the newer sciences—economics and psychology, among others—for new and better wisdom that will lead nations to direct their policies more intelligently and, above all else, prevent wars. The whole problem of education has been re-examined and a wealth of experiment and new theory been attempted. The historian of political institutions will hardly expect discoveries with regard to either education or the social sciences to effect swift improvement. Certainly, they have effected no revolution as yet. Mr. H. G. Wells's assertion that the fate of civilization hangs upon "a race between education and disaster" seems to exaggerate both the potentialities of education and the stupidities of man. One can be less optimistic about education without feeling hopelessly despondent over the fate of the universe.

In taste as in education, the record of democracy can also

be claimed by the pessimists. Quantity production and the decline in craftsmanship have cut off at the roots the most widely diffused sources of beauty and the appreciation of beauty. Yet counter-forces are visibly at work, and such inventions as the radio and the moving-picture hold obvious possibilities for the development of popular taste.

The only certainty that can safely be set down about the democratic experiment is that it has still to discover the straight road to Utopia that its originators confidently hoped it would take. The old complexities of man's nature have been multiplied by the new complexities of his machines. Before such a tangle of contradictory forces prophecy is idle, and the most that the optimists can fairly assert is that democracy is the best basis of social organization that has yet been discovered.

3. PEACE OR WAR

The World War left in its wake a natural preoccupation with the problem of peace and how to preserve it. The League of Nations was chiefly planned as a machine for preventing war. The Utopians asked for nothing less than a world-state that would make war impossible. The goal that Tennyson had pictured as a poetical fancy:

> "Till the war-drum throbb'd no longer, and the battle-flags were furl'd
> In the Parliament of man, the Federation of the world,"

was seriously urged as a practicable aim. Since extreme na-

tionalism was a major cause of the World War, all patriotism was arraigned as a baleful influence.

Meantime slower forces have been set in motion, designed not to make war impossible but to make it less likely. The

From a photograph © Ewing Galloway.

THE FIRST CONFERENCE OF THE LEAGUE OF NATIONS, HELD AT GENEVA IN 1920.

League of Nations has become an increasingly effective agency for holding in check the extravagant nationalism of Europe. The division of that continent into relatively small nations was accentuated by the Treaty of Versailles. While a true federation of Europe seems as far off as ever, enough economic and commercial unity to prevent minor irritations and facilitate industry and the interchange of raw materials

and products seems within the bounds of possibility. Whatever Americans may think of the wider aims of the League, and however they may be opposed to American membership in it, they can surely applaud its European activities and welcome every gain in its influence over European problems. The forces making for war are still active in Europe, as the post-war period has revealed with amazing frequency. Some form of European union respecting nationality but subordinating it to the welfare of the European community has long seemed likely to be the next great step in world-organization. If the League can contribute progress toward that end, it will amply justify its existence.

More fundamental in its outlook and even slower to develop is the habit of settling international disputes by arbitration or by international courts. The first conspicuous example was the submission to arbitration in 1871 by the United States and Great Britain of the Civil War claims based on alleged help given the Confederacy by Great Britain. The Hague Conferences of 1899 and 1907 created permanent courts of arbitration. Finally, pursuant to the Versailles Treaty, the Permanent Court of International Justice was established in 1920. This general movement looks toward an ultimate development and codification of international law and the gradual establishment of a rule of law as between nations, corresponding to the rule of law that has been successfully established as between individuals in civilized nations.

While Europe has been wrestling with its own difficult

problems, a spirit of unrest has spread around the world, beginning with the Mohammedan peoples of the Mediterranean, spreading from Russia to India, and entering China. Bolshevist propaganda has played its part in fomenting disturbance, but the main source of revolt has been the reaction of Eastern minds to Western education and contact. The differences of race and character between the two regions have already been stressed. It could hardly be expected that the East would be occupied, governed, educated, and developed industrially and commercially by the West for generations without developing a Western ideal of nationalism. Whether the East is ready to stand alone, whether China, for example, can fuse its diversities of speech and government into one self-ruling nation, is beyond prediction, nor can the effect upon relations with the West be foreseen. The East may be absorbed in its own problems for generations to come; or ambitions may bring swift clashes along racial lines or across them; or mutual understanding and respect may develop to lessen the tension of the ancient rivalry of East and West. All that is certain is that new forces are active from the Mediterranean to the Pacific, and that their end is afar.

4. A TIME OF CONFUSION

It has already been suggested that the twentieth century bears many of the marks of an era of transition, of a century like the fourteenth or the seventeenth, when old motives were weakening and new forces were still germinating under-

From a photograph © Wide World Photos.

THE COURT OF INTERNATIONAL JUSTICE AT THE TIME OF ITS ESTABLISHMENT IN 1920.

ground. If it is insisted again that there is no such thing as an era or an age, and that such groupings of years are simply convenient ways of describing tendencies, there can be no harm in setting down this broad characterization of the present as a time of confusion. Yet the whole picture may be as swiftly changed as was the peace of the world by the War. History coincides with no convenient units of time. Centuries correspond accurately with nothing but the calendar. It may well be that the present years are the threshold of a great and stirring period. All that is suggested is a superficial characterization of the immediate present.

Among the qualities which most obviously contribute to this impression of confusion are intense activity, a spirit of experimentation, and a curiosity that doubts all things. The recent course of religion and art is typical of these tendencies. Never were there so many new religions or so much experimenting with old religions. The West studies the East and the East studies the West. Every item of faith is examined and questioned. Similarly, modern art has experimented with new theories of form in painting and sculpture and new scales and harmonies in music. Futurist succeeds to cubist, and both are rejected for a neo-classicism. There has been a break-up of technic and standards. Perhaps ground has been prepared for a new and greater art, but the greater art has yet to appear. Moral standards, and ancient institutions like marriage, are similarly facing question and experiment.

To name these characteristics is to suggest that past dec-

ades of scientific training may furnish a clew to the spirit of the present age. Yet the activity is too casual, the experimentation necessarily too inaccurate, since it deals in human activities, to be fairly compared with the thorough and methodical researches of science. If science has indeed developed the mind of the present, its fundamental axioms have been forgotten in the wider field of life. The suggestion is strengthened that the modern mind has outlived its earlier absorption in the scientific quest, and has yet to find either its philosophy or its goal for the future.

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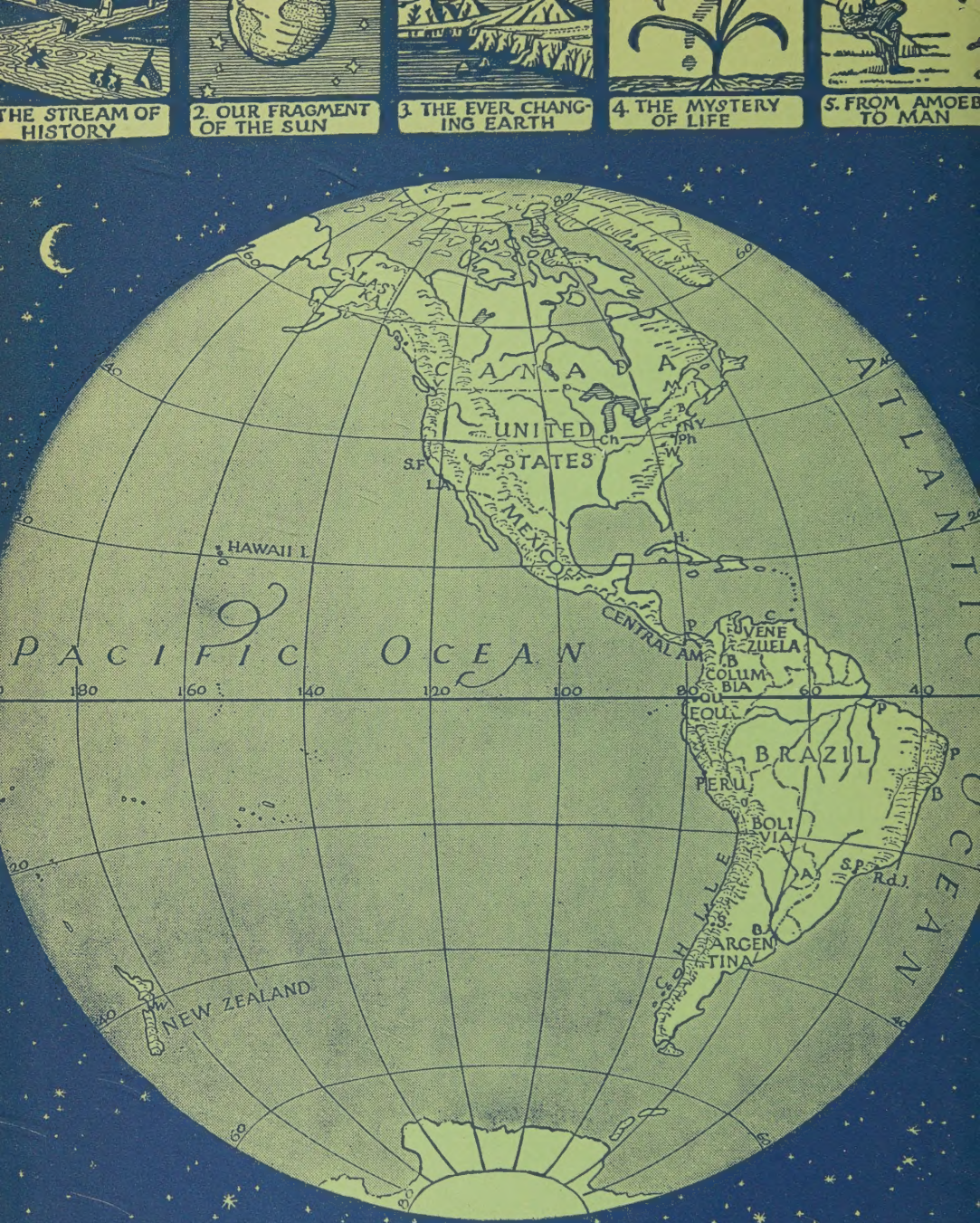
THE STREAM OF HISTORY

2. OUR FRAGMENT OF THE SUN

3. THE EVER CHANGING EARTH

4. THE MYSTERY OF LIFE

5. FROM AMOEB TO MAN



1 CIVILIZATION F THE FAR EAST

12 THE COMING OF THE NORTH

13. CIVILIZATION BEFORE GREECE

14. THE STORY OF GREECE

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THE COMING OF MAN

7 HUNTERS OF THE OLD STONE AGE

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10. DAWN OF C IZATION